TIPS Forum 2000
Paths to Growth & Employment in South Africa
FORUM PROCEEDINGS

INTRODUCTION

Rashad Cassim of TIPS welcomed delegates and explained that the Trade and Industry Policy Secretariat (TIPS) was essentially funded by the Canada's International Development Research Centre, Germany's GTZ and USAID. The forum would differ from previous forums, which had been primarily about trade policy, in that it would focus on PATHS TO GROWTH AND EMPLOYMENT IN SOUTH AFRICA and would be attended by economists and labour and poverty experts not usually found at TIPS forums.

An important feature of the annual forum had been the growing recognition that the nature of economic policy-making had changed quite fundamentally, and that the inter-linkages between different economic departments had also increased quite substantially. It was well known that the labour market problem in South Africa was not necessarily or exclusively a labour market problem, nor was it exclusively a macro problem or a trade policy problem. It was unfortunate that the forum was taking place at the same time that organised labour in the form of Congress of South African Trade Unions (Cosatu) was holding its annual conference today, but TIPS had advertised its forum long before Cosatu set its dates. One difficulty TIPS had in being, in a way, a kind of intermediary between the policy-makers and the research communities, was to reconcile the mismatch between the producers and consumers of policy research. This indicated a need to put more effort into translating academic research for policy-makers and building their absorptive capacity. He appealed to the academics present not to compromise on their technical rigour but to also emphasise some of the key findings and solutions the policy-makers were really concerned with.

KEYNOTE ADDRESS

THE EMPLOYMENT PROBLEM IN SOUTH AFRICA

Gary Fields, Department of Labour and Economics at the School of Industrial and Labour Relations at Cornell University.

Fields set the tone for the forum by saying that it was unquestioned that South Africa had an unemployment problem. By the narrow The International Labour Organisation (ILO) definition of unemployment (those who did not work in the last seven days but who were actively looking for work), the unemployment rate was between 12% and 20% of the labour force.

By the broader definition, which included not only the narrowly unemployed but also those who were not working but who said that they would accept a suitable job if one were offered, the unemployment rate in South Africa rose to somewhere between 27% and 34%. This was a serious and urgent matter for policy direction.

But as high as these numbers were, they captured only part of the problem. What South Africa had was an employment problem. The employment problem included the unemployed but it went well beyond that. It encompassed those who had very low hourly wages, those with inadequate monthly or yearly work hours, those who had to work too long just to be able to eke out a meagre livelihood. Unemployment was just the tip of the proverbial iceberg.

When it came to ascertaining how large South Africa's employment problem was, there had been several estimations. Bhorat & Leibbrandt had estimated a low earnings line, or the wage required to enable an average household to escape poverty, given the mean number of employed and the mean number of unemployed workers in a typical South African household. They had estimated that this low earnings line amounted to about R650 per month in 1995 Rands and that about 46% of the labour force in South Africa - or about seven million people - earned less than that amount. The unemployed, defined broadly, made up about half this group, and the working poor made up the other half.

Once the issue was defined as an employment problem, including roughly equal numbers of those who were unemployed and those who were the working poor, different policy analyses and prescriptions followed. The goal was no longer merely to create jobs. The goal was to create good jobs. It was as important to raise the earnings of the working poor, as it was to get the poor working.

In examining what South Africa could do about this situation, Fields said he wanted to deal with facing employment and wages simultaneously; increasing the derived demand for labour in a globalised world economy; confronting the structurally unemployed and underemployed and getting the right labour market model.

On the need to confront wages and employment simultaneously, he said first year economic students were taught that demand curves were downward sloping but not vertical. In the labour market, this had two implications: other things being equal, higher wages would lower employment and lower wages would raise employment. This was not a pretty choice but then again, economics had been called "the dismal science" for good reason. But in contemporary South Africa, there were those who said that there was no such trade-off between wages and employment. He had heard three arguments to this effect.

The first concerned wage increases. It had been said that if wages were raised, firms would hire just as many workers as before because employment was determined by something else; perhaps by how much labour was required to support a unit of capital. Those who held this view said one should just go for wage increases and that employment would not suffer.

The second argument went in the opposite direction. Suppose that, to try to create more jobs, wages were to be lowered. According to this argument, firms would not hire any more workers from the target group than before. Rather, if wages were to be lowered, they would hire those who were not part of the problem to begin with, namely the skilled. By this line of thinking, the social challenge of employing the poor would remain unmet.

The third, macro economic, argument was that pushing wages up raised purchasing power, and through multiplier effects, led to more jobs being created than were lost. He had not seen evidence of this. What he had seen had been several studies estimating wage elasticities of demand for labour of between minus 0,5 and minus 0,7. This meant that a one-point increase in wages would tend to reduce employment by at least half a percentage point. As with anything else, in econometrics there was a confidence interval surrounding these point estimates, but what came out of this literature very strongly was that nobody had found anything like a zero wage elasticity of employment, let alone a positive one. To maintain that there would be no loss in jobs if wages were to be raised, in light of the evidence, was wishful thinking.

To return to the definition of the problem, Fields said that if the problem was one of unemployment alone, then the implication of these employment elasticity estimates was clear. One got more jobs by holding down real wages. He did not advocate that, but was merely stressing that this was an implication. But when one conceived of the problem as being an employment problem, one was led to ask not only whether people were working but also how much they earned when they worked. South Africa had to choose carefully between policies aimed at raising the labour market earnings of the employed and policies that would raise employment by holding down the growth of real wages. Would it be socially desirable to have lower real wages but more jobs? What about higher real wages for those who were employed, but fewer jobs? The answers could only be resolved through a continued society-wide debate.

The tripartite approach to social negotiations in South Africa, as in the rest of the world, left out a very important group - workers who were not employed in the formal sector, who did not belong to trade unions, and who did not have representatives at the bargaining table. Extending collectively bargained contracts was not helpful to the millions of South Africans who were out of work, and the millions more who could not possibly be covered by these contract extensions because there was no employer who could be made to meet the agreed-upon terms. These were the people who were self-employed, employed in the informal sector where there was nobody from the government enforcing regulations. What promoted the interests of the unemployed and the underemployed was shifting the demand for their labour.

The trade-offs between higher wages for some at the cost of lower employment, and the reverse of higher employment and lower wages, could perhaps be softened, although not eliminated, by bringing another element into the discussion - the possibility of shifting the derived demand curve for labour so that more workers were demanded at any given wage than before.

Fields said it was well known that the so-called East Asian Miracle produced rapid economic growth, first in Japan, then in Hong Kong and Singapore, then in Korea and Taiwan. In each of these economies real per capita gross domestic product grew at about a 7% annual rate for decades. Successfully penetrating world markets was a major contributing factor. No wonder that the so-called Asian Tigers continued their export drive, and that the so-called Asian Cubs - Thailand, the Philippines, Indonesia, Malaysia and, more recently, China - sought to become Tigers themselves. While most people were aware of the macro-economic successes in East Asia, fewer knew of the labour market successes that accompanied those macro economic successes. When this rapid growth process first got started around 1960, real wages barely rose. In Taiwan, real wages were only 2% higher in real terms in 1970 than they had been in 1960. What did grow in Taiwan during the decade of the 1960s was employment. This was true in other countries in that part of the world to the same extent. Thus, in the first phase of the East Asian Tigers' growth, the surplus labour with which they had begun came to be employed at virtually constant wage levels, which if it happened in South Africa would not be a bad thing. If real wages remained the same, and if a whole lot more people became employed, that would not be a bad outcome.

What happened in East Asia was that the labour surplus became exhausted as the the labour market tightened to the point where employers needed to raise wages in order to retain existing workers and attract new ones. In each of the Asian Tigers, real wages grew apace of per capita GDP growth and unemployment rates of 2% to 4% were maintained throughout the decade of the 1970s.

When he first went to East Asia in the early 1980s, Fields said he had presented the then current figures for the Asian Tigers on full employment, improved job mix, rapid real wage growth, lower inequality and falling poverty rates during the epoch of rapid export-led growth. The argument he made then, and made now, was that the trade and industrialisation strategies that they had followed in those countries had been good for workers and should be continued. One commentator listening to him at that time said: "That's all well and good for the past, but that won't work now. We live in a highly globalised world. We can't possibly succeed by exporting in the future. Today's world economy was too competitive for that." Well, since that time, real exports in the East Asian and Pacific countries had grown by 164% in the 1980s and by 187% in the first eight years of the 1990s. Real GDP per capita continued to double in the 1980s and again in the 1990s. So too did real wages, and full employment was maintained except for the crisis years at the end of the 1990s.

The Asian financial crisis that had began in 1997 spread to various countries and peaked in Korea in November and December of 1998. The unemployment rate in Korea shot up to above 8% but was now back down to 3.6%. Real wages in South Korea, year on year, had risen by 11%. Coming back to South Africa, what could work here was what has worked in East Asia for decades - producing things that those who had the purchasing power elsewhere in the world wanted to buy. A fundamental truth was sometimes forgotten. If you were poor, you could not get rich by selling to yourself. You could only get rich by selling to people who had the purchasing power and who wanted to buy your goods.

The challenge for South Africa was to find new niches in which South African producers could become world class, and thereby increase the derived demand for the nation's labour. There was only so far one could go with metals, alloys and precious stones. The new niches need not be new products. What new product had Japan invented other than the Walkman? Their real successes had been in existing products such as footwear, furniture, ballpoint pens, microphones etc. Government could not determine what these products were. It was the energies of South Africa's private sector that had to be harnessed in order to identify these products, meet the challenges of selling them in world markets.

Take the example of computers. No one demanded a computer that had been made in a particular country. What they did demand was a computer with the right features, reliability, good service facilities and reasonable price. Most people would buy a computer from wherever in the world it came. The people of East Asia benefited by manufacturing computers, not because they could buy them cheaply when they produced them - in fact, Asians who studied at Cornell University in the United States bought computers, television sets, refrigerators and washing machines and shipped them home to their Asian countries because it was cheaper than buying them in their home countries because of the tariffs and other sorts of barriers that their home countries placed on imports. But the success that these countries had was by using the wages and their earnings from producing world class products to buy in world markets the things that they most wanted.

Fields said he believed very strongly that this model could work today. In fact, it might be argued that for South Africa to prosper, such a model had to work today. Why? Because the harsh fact was this: the rest of the world did not need South Africa's working people, but South Africa's working people did need the rest of the world. There were 1 300 million Chinese in the world, and 1 000 million Indians compared with 40 million South Africans. Those two Asian countries alone offered all the unskilled labour that anyone in the world would want to employ, plus a fair amount of skilled labour as well. If a business were thinking of producing in some place in the world, why would it not want to produce in China or India? Why should it want to produce in South Africa? Profit maximising enterprises had to want to employ South Africa's labour if the nation's employment problem was going to be solved, and this implied that if businesses were going to want to invest in South Africa, build factories and create jobs, they had to find South Africa an attractive place in which to operate.

What promoted this? High productivity of workers, a co-operative work environment, the opportunity to make money. What impeded this? Excessively restrictive labour practices, the labour hassle factor, an unsafe living environment for the business executives and their families; the lists could go on and on. According to research being completed by the Greater Johannesburg Metropolitan Council and the World Bank, corporate CEOs identified the leading constraints to business growth in South Africa as crime and violence, labour regulations, interest rates, exchange rates, corruption in government, skills shortages and tax rates. The leading priorities for remedying this situation, according to these CEOs, were for the national government to promote an efficient and flexible wage policy in the labour market, to maintain macro-economic policy stability, and to promote an efficient and flexible interest rate policy.

Europeans used the term "social partners" to describe the ways in which business, labour and government could get together to try to advance their common interests. South Africa had a variety of ways in which this could be carried out. There is Nedlac, workplace forums, sectoral bargaining councils, skills training boards etc.but still, to an outsider looking at South Africa, the overall attitude appeared to be conflictual and confrontational. Partnership was about the last word one would think to use to characterise South Africa.

It would also be important to confront structural unemployment and underemployment. Clearly the South African labour market had a deficient-aggregate demand problem that created unemployment, but in addition, part of the problem in South African was structural unemployment. Employers were demanding workers with certain types of high level skills, which the unemployed and the working poor did not possess.

Giving an example of the kind of employment problem South Africa had, Fields said that if it had 20 people seeking 10 jobs and employment increased by 10, then it had a deficient aggregate demand problem. But if 20 people were seeking 10 new jobs and employment increased by 5 because the other 15 were deemed unqualified, then it had a structural unemployment problem in addition to its deficient aggregate demand problem.

South Africa did have a structural unemployment problem. There were jobs that employers wanted to fill for which suitable workers could not be found, and this structural unemployment problem started to be a skills problem. The nation could selectively aim to improve the quality of its human resources through a kind of Say's law, which said that supply created its own demand. Thus, if more highly qualified people were educated and trained in the right kinds of areas, South African employers would want to hire them. People with computer skills, for example, were said to be in very short supply, and if there were more of them, one would expect that they would be employed.

The skills gap in South Africa was vast, far exceeding the available resources, and difficult choices would have to be made. One particularly crucial one was whether to focus on upgrading the skills of the currently unemployed and underemployed, or alternatively, emphasising the education of the next generation of workers. Too many budgetary allocations were based on the rule that "doing some of this and some of that was better than doing just one thing alone" and South Africa would do well to avoid such politically attractive, but economically unwarranted, kinds of decisions.

Giving another word of caution, Fields said that the basis for policy formulation in South Africa, hard-headed decisions needed to be made, confronting opportunity costs, fully recognisingthat given the very limited budget that the government had, to do more of one thing meant to do less of another, and weighing the social and economic costs and social and economic benefits as carefully as possible was essential in making wise policy choices.

A quite different need for South Africa was an analytical one. There did not yet seem to be a labour market model for South Africa that properly incorporated the main stylised facts. Clearly, the right labour market model was not the competitive labour market model. That was not right because wages were not set by supply and demand in South Africa. Nor was the right model an integrated labour market model. There was too much labour market segmentation in South Africa for that. Nor did the Harris-Todaro model fit. The cities were not uniformly high waged vis-à-vis the rural areas. The least bad fit came from the crowding model. The crowding model was the idea that those who could not get formal sector jobs, crowded into the informal sector, depressing earnings levels there. But that did not fully fit the South African case either because of South Africa's large volume of open unemployment. Thus an overall vision of how the South African labour market worked and how the various components linked together remained both a puzzle and a challenge.

Fields said that while researchers always liked to call for more research, this was really needed in South Africa because the policies to combat the employment problem could be designed better once an overarching structure was in place. Without in-depth analysis, the danger was that an intervention appropriate in one labour market context would make things worse in this one. For the poor and unemployed in South Africa that would be a great tragedy indeed.

South Africa therefore faced five major challenges. It had to recognise that the problem went far beyond the several million openly unemployed, even by broad definitions, and included also several million others who were employed by standard international definitions but were not earning enough by South African standards. It then had to formulate its policies, since the number one goal was to improve the lives of as many of these people as possible through better earning opportunities. It had to recognise that national policies to deal with the employment problem could not be rationalised and designed well until choices were made about whom to try to help most. It needed to decide whether the priority was to pursue higher wages for those employed, or to seek fuller employment.

It had to recognise that it could not do it on its own and that it needed the rest of the world. It could only get so far with products that its own business people were able to produce and that its own consumers wanted to buy and could afford to buy. South Africa had to be an attractive place for South African entrepreneurs to do business, and for foreign firms to do business as well. If it wanted to make progress on the employment problem, its labour and human resource policies, and even its cultural policies, had to be co-ordinated towards achieving this end. The road to success was to produce goods that those with the purchasing power in South Africa and in the rest of the world would want to buy. South African businesses and workers needed to join forces to achieve this. Changing from a confrontational to a co-operative approach would not be easy, but it was necessary.

It also had to recognise that in addition to deficient aggregate demand for labour, it also had a structural unemployment problem. Many, if not most, of the target workers did not possess the skills demanded by employers. It would have to seek efficient ways of marshalling the limited resources at its disposal to educate the young and train the others. It would be helpful to pose the question of opportunity cost: if one did this, what could one not do? And prioritise energies and budgets accordingly. Finally, it should recognise that one barrier to formulating policies to combat the employment problem in South Africa was the lack of a guiding labour market model.

Meeting these challenges was of vital importance. The economic well being of literally millions of South Africans hinged on the wisdom of the choices made.

OPENING ADDRESS

Alec Erwin, Minister of Trade and Industry

Erwin wryly noted that he was addressing the forum at about the same time as President Thabo Mbeki was opening what was expected to be a somewhat acrimonious annual summit of Cosatu, the labour union, which was calling for urgent action to deal with unemployment and was sharply critical of government's economic policies.

Government, he said, was very aware of the problem of South Africa's "jobless growth" and had decided that it was time to review its policies and institutional structures. In his department, some rather harsh and blunt conclusions had become evident about the inadequacies of existing structures. This was not because of neglect, but because no fundamental review had been undertaken of what the department should be doing, and how this should fit in with initiatives in other parts of government.

It was clear that government had inherited an economy which had structural problems and the debate being highlighted by Cosatu and others was whether the right actions had been taken to correct those structural flaws, particularly the massive wealth disparities among South Africans. At the same time, the economy's ability to export anything other than its traditional primary products was diminishing, not increasing, while unemployment and structural employment problems were worsening and the domestic market was clearly stagnant. In short, if the economy hadn't already had a train smash, it was about to have it.

Trends in the world economy, most particularly in those countries with roughly comparable or similar types industrial structure to South Africa, were moving very much in the opposite direction. This left South Africa with high and uncompetitive cost structures, an economy that could go nowhere, with an imminent threat of quite major de-industrialisation in the previously heavily protected automobile, clothing and textile and electronic industries. Strategic decisions had been taken, after much debate and "intellectual blood on the floor", that the economy had to be opened up to turn the cost trajectories around and to bring South African manufacturing practices, costs and production practices towards world benchmarks. To stay outside of that was fatal, it was argued. In the process, government had to correct major fiscal problems. It had inherited a very opaque and inefficient fiscal system. It had to put in place a labour market that would be predicated far more heavily on an interaction between capital and labour in the labour market, with a somewhat lighter hand of regulation from the state.

In agriculture, steps had to be taken to remove the structure of support and protection which had persistently, for nearly two decades, meant that food prices were usually the leading edge of the inflation index.

It had been decided that the public sector would have to be restructured very fundamentally as it had to meet the basic needs for infrastructure. It could not do this off traditional state, on-budget financing mechanisms. This would have perpetuated the perceived high risk of the economy and fragility of its financial and fiscal systems. Changing this called for partnerships with the private sector. Government had to bring in technology partners and new management systems because the state sector and public parastatal corporations were tremendously over-geared. With the clear exception of Eskom and one or two others, most state sectors were not alive to new possibilities and senior managers tended to manage in the interests of their own personal pensions as opposed to the interests of the economy.

In hindsight, it was clear that government had been unable to carry out any counter-cyclical or corrective investment drives from the public sector, where investment had been flat. It had not realised how difficult it would be to get investment levels up and, even today, the public sector was not the leading agent of growth that those from the union movement and elsewhere argued that it should be. But institutions could not be asked to do something they were not institutionally geared for. They had to be fundamentally changed before they could effectively bring about world-competitive, efficient infrastructural expansion in this economy. It had taken a long time, for example, to get the port authority to see the difference between administering a port and developing a port. It had to separate out its regulatory administrative function from its investment and developmental functions.

Some of the key changes had now been made. On the fiscal side, the degree of correction had been very high. There were still some risk areas in local and provincial government, but there was a clearer picture of what was happening, and where the risk areas were. The adjustments made in monetary and fiscal policy had made the country much more robust, much more capable of dealing with volatility in the financial markets.

In terms of private sector adjustment, the move towards competitiveness was fairly clear and export performance was good. But there were two major problem areas. Levels of investment were not yet high enough and it was not guaranteed that they would automatically rise despite the great deal of common effort and focus that had been put into facilitating and increasing investment levels.

Secondly, the restructuring of the public sector still had to be completed. Certain basic prices and costs were still too high, especially in transport and telephony.

Until these could be corrected, no major long-term expansion of new capacity could be expected because not enough certainty had been created in the basic infrastructural platform. What was needed was a basic logistical platform that would give internationally competitive investors certainty that if they put up a Daimler-Chrysler plant in East London, for example, their investment would be good for 20 to 30 years because the cost platform for exporting those automobiles out of South Africa would be stable and predictable over a long period of time. To encourage smaller and medium enterprises to start investing also still required a number of corrections in the existing institutional and legislative framework.

But the South African economy in the year 2000, and the South African economy in the year 1993, were now two very different economies. Government's approach had not been just export-driven development as exports, imports and domestic production were governed by the same set of forces and the whole economy needed to be restructured. There was not a traded, internationally competitive export sector, or a domestic or non-traded sector, that could afford to be somewhat different. The factors at work were affecting both. The whole economy had had to be turned around and massively restructured. However, it was impossible in these circumstances to create large amounts of net new employment.

Erwin said it was instructive to take a closer look at what was actually happening with globalisation and why firms, be they local or foreign, made investment decisions. Because of the speed of the movement of capital, the investment calculus now required much more predictable environments if investments were to stay in an economy. This was preferable to "hot" money that could quickly move in or out, and trying to ringfence investment so that it could not move out at all. This was because competition for investment was so fierce that if there was a perception that the political economy was moving away from the general trend in other political economies, investors would not want to be here because they could not predict what would happen.

This therefore had a lot to do with democracy. Democratic environments were now not just a "nice to have." Sophisticated investors wanted to be fairly clear that there was a social mechanism for dealing with the inevitable conflicts and clashes that emerged in any global economy these days. The more transparent, the more open the decision-making processes, the better. For South Africa, this meant a number of things. It meant continuing with some of the policies already adopted, adjusting the emphasis of some and developing new policies.

South Africa had considerable natural resources, a sustainable and cheap energy supply, and an experienced industrial proletariat that, with good training and management, was capable of reaching the productivity levels of anywhere in the world. And it was geographically very favourably situated if it could get its logistics right.

It had adopted an integrated manufacturing strategy which was closely associated with beneficiation processes. It had to now introduce new forms of production. If it did not, it would not be able to solve the employment/unemployment problem. And that required a much more systematic support for the processing of products, ensuring that logistics and infrastructure were good, and that there was technological and other support for the beneficiation processes.

It would not always be easy. South Africa had an obvious advantage in steels, but it also had to compete with close to US$85 billion invested in developed country steel industries in the mid-1980s. This meant that there were many steel plants sitting there whose capital costs had been amortised and which were selling at marginal cost. South Africa was setting up plants that were more efficient and lower cost, but they still had to compete in a market that was highly protected and very heavily subsidised.

Then there were the so-called new economies, or the business services associated with IT and others, that had to be developed and enhanced because all forms of production were increasingly absorbing and requiring information and communication technology systems.

South Africa had much to do to strengthen that sector, build on some of its existing strengths and alter the relative price of basic telephony transactions, which were still too high. A lot more training was also needed.

The third dimension was the need to create a regional production system to benefit from more effective, lower cost production in a range of products. Initially, this could involve raw material products, and later it may well move to assembly and manufacturing products.

There were many possibilities in, for example, the clothing industry. But to realise these, South Africa had to encourage its neighbours to develop a whole range of assembly processes in clothing such as cut-make-trim while producing much larger quantities and supplies of basic fibres. The potential was high, but the infrastructure, investment and support for these activities had to be put in place if the region was to take advantage of the changing structure of the clothing industry world-wide and expand production.

Other examples included buying gas from Mozambique, doing beneficiation in Mozambique, buying gas and developing gas fields in Namibia, and putting in place joint agro-industry projects. Tourism was quite clearly a product of the new economy and unless there were sophisticated booking and advertising mechanisms and websites, the region would not attract as many tourists as it could.

South Africa also needed a very clear international economic strategy on how it was going to engage with the international economy. The main features would be strategies to work with other countries to try and bring about a higher degree of stabilisation in the international financial sector. It also needed a strategy to deal with the world trade system and develop a counter-weight to the current inertia of the quad – United States, Europe, Japan and Canada. It needed to pull developing countries together to mobilise for the urgently needed so-called "balanced round" in the WTO. Some of protesters might want to get rid of the WTO, but without it, it would be the rule of "might is right", which was very uncomfortable.

A balanced round would help change the agricultural system, reconfigure industrial tariff structures, re-balance and realign the anti-dumping and countervailing duties issues, deal with certain specifics in Trips and Trims, and deal with the new issues such as the environment and labour. Also needed would be clear strategies for Africa, SADC and the Customs Union. The "butterfly strategy", for example, was an attempt to expand the trade network from Europe or the US to open up links with the rest of Africa and South America, Asia and the Middle East. This was hard work as there had been zero institutional trade links with most of these regions.

Globalisation, without any doubt, had a very powerful impetus towards uneven development, inequality and inequity and marginalisation. And the speed with which those things happened now was faster than before. This called for a much more concerted and focused set of interventions by the state to deal with the socio-economic empowerment of those who had been excluded from the economy. They had to be pulled back into the economy to create counter-effects to the aggregating effects of employment that tend to come from the international markets, to open new areas, to utilize information technology, not just to the benefit of those who had it, but to spread it out to everyone in society and use it for developmental purposes, trade purposes etc.

The kind of approaches used in the spatial development initiatives would be used through black economic empowerment in the integrated rural infrastructure programme. The DTI would put in place capacity to interact with local communities and rural areas, to assist and support black economic empowerment groups so they did not get locked into over-geared, crazy schemes, and to deal more effectively with actual enterprises. DTI had tended to sit and wait for people to come to it and its task now was to get out and talk to enterprises that it was supposed to deal with.

The implications of this for the state were interesting, but taking either one of the two polar positions was clearly wrong. The kind of classic straw person, neo-classical position that the state should not be in the economy was clearly nonsense. The position that the state should run the economy was also nonsense. But the fact that the state should not be active in the economy was a problem.

The challenge to the state, therefore, was to identify the structural changes taking place in the political economy and decide how it could influence this in a particular direction. So those who argued that globalisation, not governments, should rule, were wrong. Government had to use the instruments available to it as a state to facilitate certain processes within the economy, to regulate and supervise increasingly certain processes and to forge working, active alliances with other states and alliances.

To prepare itself to deal with all these challenges, the DTI had undergone a fundamental restructuring to deal with policy analysis, service delivery and regulation and administration.

Much work and negotiating still had to be done. Some of the toughest negotiations were not with the European Union, but with Public Works to get a new building; between the Public Service Commission and the unions.

DISCUSSION

Asked if he envisaged South Africa being an alternative centre of development rather than being on the periphery of world growth, Erwin said he was rather thinking of developing countries as a whole playing a more active role in shaping a new world economic order through regional groupings. They had to increase trade and investment flows between themselves and not just concentrate on the European Union, US and Japan as that could just exacerbate the current protectionist tendencies developing there. Some economies, like South Africa in southern Africa, would have to play a leading role in that region but it had to have a strategy, a vision, shaping that role. It would be a profound mistake to be shortsighted and regard itself as a small, isolated economy whose only concern should be to grow at 4%. The regional approach meant that, for example, in trade agreements like SADC, South Africa could not be protectionist. It had to take a very strong and committed leap to opening up its markets to its neighbours as quickly and as effectively as possible. That would allow them some space to get development going, and would allow the region as a whole to grow.

He was also asked how government planned to involve labour in shaping its vision. Erwin said that the development of skills in the labour market would be vital if South Africa was to attract job-creating investment. To this end, the South African Qualifications Authority had broken down the old 143 artisanal categories, and was working towards a more focused approach to about 16 terrains to meet modern-day needs.

He did not think that, as he and others had argued before, that the Swedish model to force the economy to create high value jobs through highly centralised bargaining was applicable to current-day South Africa. There was a trade-off between wage and employment, which called for a structured labour market where different forms of investment, employment creation could fit in. But the labour market had to exhibit a degree of wage differentiation appropriate to the different levels of investment. It had to exhibit flexibility in the work process, both on the part of labour and management. This called for dialogue and adaptability while ensuring that unions had rights, that employers and unions had certain obligations to follow procedures. But at the end of the day, the light-handed, so-called voluntary approach adopted by government at the beginning was correct. This would force the employer and the employee organisations to consult with each other.

"Don't try and plan the labour market ahead. It's not going to be very easy," he said.

It was far too simplistic to merely rail against, or argue for, labour market flexibility or low wages. The issue at stake was, could the country actually provide employment on a growing scale? What were the conditions needed to provide employment on a growing scale? Then one adapted the labour market to meet those conditions.

The reason it was possible to have an alliance with the union movement in South Africa was that, in fact, a strategy of unskilled, poorly paid sweatshop workers was not a strategy for success. It was a disaster and it would go nowhere. So there was a commonality between government, business and labour and that was that a labour market could and should be designed that was based on equitable rights and obligations.

Concern was expressed that the government's chosen path was a long and slow one, which implied that unemployment and poverty would remain high for a very long time, with possible negative effects on social stability.

Erwin said there were no quick and easy answers. Some things would take longer than others would but all needed to be done. For example, to support agriculture in rural areas, instead of just producing maize, to start working towards producing other marketable crops, required infrastructure to be better placed out there. It required e-commerce facilities and spreading the possibility for economic activity throughout the economy. So as mainstream manufacturing industries were restructured, attention had to be paid to creating new economic possibilities particularly using advanced technology.

This was something that the state had been very weak on in the last few years. This is why it needed such a profound change in the management of the state. The strategy fiscally was to tighten the existing expenditure because it was inefficient. It had to tighten it to create macro space. Now that had been done and government could now put in place, on budget, very considerable resources that could be applied directly to poverty alleviation and rural development. But the state could not deliver that without transformation, particularly of local government. This was now being dealt with and as there was more concerted co-ordination by government at different levels, it could correct or alleviate the restructuring effects probably quicker than many people night imagine. What he found so frustrating was that although the state had the funds, it was not getting onto the ground. People said government should spend more on health and education but what it needed was someone to say: "Look, let's put the clinic in the right place. Let's make sure that the school that we're building is in the right place because sometimes to just replicate the patterns we had before is just stupid, Just stupid."

Government accepted that if it was making a mistake, it would be judged later. The first emphasis, however, had to be on restructuring some of the basic structures of the economy. Now there was a far greater emphasis on actual micro delivery mechanisms to get things done out there. The government had created the resources to do it, but had to ensure that it also had the systems to deliver it.

TRENDS IN EMPLOYMENT AND THE EMPLOYMENT ELASTICITY IN MANUFACTURING 1971 – 1992 AN INTERNATIONAL COMPARISON

Dipak Mazumdar, Department of Economics, University of Toronto

Mazumdar said the feeling that employment growth had been lagging far behind output growth in the formal manufacturing sector had been a serious concern in development economics for a very long time.

It was first raised as early as 1974 but more recently a researcher working on India pointed out that the share of manufacturing output and GDP in that country from 1951 to 1991 had grown from 10% in 1951 to 33% in 1991, while the share of employment had grown only from 11% to 16% of the labour force. The availability of data on this had, however, been less than desirable. There were individual country studies occasionally but there had been no systematic effort to find out what had been happening in the different countries, different regions of the world although the datasets exist on CD's and datatapes.

The issue of low employment elasticity took on added significance because India, like many other developing countries, had undertaken serious de-regulation of its economy. While growth in output and productivity, which had often accompanied these reforms had been welcomed as benefits of reform, the low level of job growth had generated scepticism about the allocation of the benefits of growth.

This was especially so because the wages in the modern manufacturing sector were already so much above those in the household or informal manufacturing and service sectors. If labour absorption continued to be slow in the high wage sector, population growth was bound to increase this gap as new job seekers increasingly pressed for absorption in the informal sector.

THE TRADE-OFF BETWEEN WAGE GROWTH AND EMPLOYMENT GROWTH

Employment growth in manufacturing was obviously limited by the rate of growth of output or value added. But given the growth rate of output, there were three elements which determined employment elasticity. The first was the rate of the growth of the wage bill relative to the value added in current prices facing the producer. Mazumdar said his research had found that this seemed to play a minor role, with the share of wages not changing very much over a long period of time.

The second factor, which had been somewhat neglected in the literature, was relative rates of increase in the producer and consumer price indices, which determined the value of the wage bill for workers. This could be called the domestic real exchange rate, which was really a very important part of the scenario.

The third factor was the trade-off between employment and wage growth, which indicated the real wage increase. The trade-off depended very much on labour market institutions and on management and macro policies. In neo-classical economics, it was generally maintained that the supply price of labour was exogenously given and this, together with the production function, determined the share of wages and also the way the employment and wage trade-off worked out. But, in most economies, there was a certain autonomous element in the determination of wages. There was an institutional element insofar as, in the literature, it had been called the "insider power". Those currently employed tried to take an advantage in terms of those who were outside the formal manufacturing sector, and the stronger the insider power, the more would the trade-off be towards real wage growth rather than employment growth.

But another important element to consider, even without institutional pressure, was that the outcome would work out in different ways because labour was not a homogenous commodity, it had two dimensions. The dimension of numbers of workers, but also the number of efficiency units supplied per worker. So, faced with an increasing demand for labour, the employer always had the choice of hiring more workers, or increasing the wage to elicit more efficiency units of work from the existing labour force.

Therefore, the determination of wages by the employer rested very much on his perception of how the labour force would respond to wages in terms of efficiency, and how much additional effort would be needed to recruit new workers. The cost of maintaining them also depended on supervision costs. So, even without institutional intervention, there was a clear decision by management on the relative trade-off between employment and wages.

Mazumdar said his aim was not so much to prescribe policy, but to describe what had been happening, and to provide an accounting framework within which the data could be organised so that it was clear what the key elements were that determined employment growth or real wage growth given output growth.

He had developed a decomposition methodology to examine trends in various regions. It was relatively straightforward and did not call for anything more than maybe school algebra to be understood (see TIPS website for full methodology). He concluded that employment growth by manufacturing ultimately depended on output growth, but the enormous difference in employment elasticity in different regions had to be explained. China and South-East Asia had led world growth in manufacturing output by a very wide margin in the 1970s and 1980s. Latin America and sub-Saharan Africa had been at the other end of the spectrum.

The share of wages in each region had not deviated substantially within any of the regions and East Asia shared its growth almost equally between real wage and employment increases. But there had been significant differences between South East Asia and China on the one hand, and South Asia on the other, particularly in the 1980s. The latter had moved away in this period from the others to a labour market outcome which favoured real wage growth much more than employment growth. This development probably showed the greater strength of the power of "insiders" in manufacturing firms. In this respect, South Asia approached the experience of the EEC and Japan in both periods, and of the US in the second. At the other extreme, sub-Saharan Africa's experience emphasised employment retention at the cost of real wage declines.

The discussant, Murray Leibbrandt of the University of Cape Town, pulled out three themes. The big picture lesson was that there had always been an employment issue with regard to manufacturing growth. Perhaps globalisation exacerbated the issue, but it was a perennial one and that certainly resonated with what Gary Fields had mentioned earlier. We tended to be traumatised by globalisation as an immediately pressing thing that straight-jacketed us. But the issues about the employment absorption of manufacturing growth had always been with us.

The framework itself was useful and explained real wage growth in terms of an output effect, a price effect and an employment effect. In South Africa, the debates had tended to battle to reconcile macro-economic perspectives on the labour market, unemployment and wage growth with micro-economic perspectives. As a result, the focus had either been on wage and employment trade-offs, or on the fact that poor growth was the major problem. The framework offered an integrative device which was particularly useful.

Economists were generally very aware of the impact that the slow growth rate in the manufacturing sector had had on employment, but the introduction of the price effect element provided a link to some of the macro-economic factors that many did not think about so much.

What was interesting was the constraints imposed by the output effect and the price effect, which was quite a novel way of looking at the wage employment trade-off.

The limitations of the framework lay in the fact that there were linkages between each of the elements in the formula and while the algebra separated them out, the interesting issues almost wholly revolved around the relationships between the four sections of the formula. So, for example, a key issue in the South African debate was the link between three of the elemens - investment, output growth and labour markets. The algebra gave an output, but the policy issues were around the interaction between the three elements.

It might be that manufacturing employment had changed its structure, and if there had been a formal sector decline in manufacturing employment, why did this happen? This would not come out of the decomposition, and was not really meant to. It could also not answer questions about the relationship between wage developments in the manufacturing sector and those on the fringes.

On the actual wage employment trade-off, the paper had been quite elusive, and teasingly so, at one point telling us that the causality between the changes in wages and employment was indeterminate. Economists did not know which one was causing which, with much depending on the model used. Various factors were also mentioned to explain how internal labour markets really worked - either through insider power, which was a type of employee-driven mechanism, or through an efficiency wage mechanism, which is a type of employer mechanism.

Leibbrandt said the example of India was fascinating as it suggested that India experienced jobless growth in the 1980s, which resonated with the South African labour market experience. In that case, the reason was the de-regulation of some of the technology imports as well as allowing employers to use what was called "co-operant factors", or factors of production other than labour together with labour. Because they were allowed to use technology, the net outcome was higher wages, perhaps because labour was more productive, but less employment. But it was not due to anything in particular in the labour market, it was due to something that happened in the capital market. South Africa therefore needed to look hard at the role of the capital market in the whole employment issue.

Mazumdar said that while jobless growth had clearly been associated with the reform process, this had not involved reforms of the capital market so much as reforms of the administrative system through de-regulation and de-licensing. There had been a huge under-utilisation of fixed capital stock because of the lack of materials and delays in getting orders. With de-regulation, capital utilisation had increased, and that might explain the fact that output growth had increased while employment growth had not.

During discussion, it was pointed out that data could be interpreted in many ways, especially when it was considered that the formal manufacturing sector was always a very small proportion of the total economy and accounted for a small proportion of overall employment.

THE INCIDENCE OF UNEMPLOYMENT IN SOUTH AFRICA

Geeta Kingdon and John Knight, Economics Department, University of Oxford

Statistics abound on the unemployed, but who are they? Presenting the paper, Knight said there were two definitions of unemployment - the broad and the narrow. The narrowly defined unemployed were those who were currently not employed but who had looked for work before in the survey visit. The broadly defined unemployed were the narrowly unemployed plus those who said that they wanted work but had not looked for it recently. Both rates were very high at 39% and 26% respectively in 1998, and the difference between them was also very large at 13%.

It had to be asked whether those who had not searched for work were choosing to stay out of the labour force, or were they discouraged workers. Statistics SA had recently adopted the narrow definition as the official unemployment rate and was giving it more prominence. This was important as it could affect policy judgements about the size and the urgency of the unemployment problem. The authors believed that the broad definition was more relevant, essentially because the non-searching were "discouraged" workers. Some might not be actively searching for jobs because they hoped to get one through their "contacts" and therefore really remained part of the labour force.

It was striking that 62% of the unemployed had never held a job before. The very long duration of unemployment of more than a year among 68% of the unemployed suggested that the demand-side of the labour market was responsible for a good part of the unemployment rate.

Unemployment varied dramatically by race. Africans faced unemployment rates of 41% while the rate for whites was only 6%. Unemployment also decreased by age group, ranging from 51% for the youngest group to 17% for the oldest group. The incidence of unemployment also varied by region, gender and education. For example, people with higher education faced an unemployment rate of 6% but those with primary education or less had rates of close to 40%

Women experienced substantially higher unemployment than men while rural unemployment rates were higher than urban rates, mainly because of the legacy of the apartheid era "homelands". Those who had never previously held a job mainly dominated entry into unemployment and only 38% of all unemployed people entered unemployment from an employed state. The fact that most of the unemployed had never held a job before was one of the most striking features of unemployment in South Africa. Most of these people were Africans, lived in rural areas or women.

Age was an important factor as the young were more likely to search rather than get "locked-in" to an undesirable job. They were also more able to afford searching for jobs while they were unemployed because they had fewer financial commitments and might be more ignorant about what their skills could command in the market.

Among the older age groups, about 50% of all unemployed persons (61% women and 37% men) aged 34-64 had never worked before. This was either due to late entry into the labour force (more likely among women after child-rearing years), or unusually long periods of unemployment because of the lack of adequate job opportunities.

Analysis had shown that Africans had a 35 percentage point lower probability than whites of ever having worked before.

On whether unemployment was a voluntary or involuntary state, it was found that less than a quarter of those people who had worked before had quit work voluntarily rather than because of being sacked, retrenched, ill or at the end of a temporary job. The fact that most people had quit work involuntarily reflected low vacancy rates and high unemployment rates. There were, however, considerable variations within groups. For example, groups that were more likely to quit work voluntarily were the young, the highly educated, women and whites.

The length of time people remained unemployed depended on the rate at which they received job offers and on the extent to which these were accepted. For example, for jobs such as manual work, younger people were more likely to receive job offers than older people if they were seen as being physically more capable. Younger people might also be more likely to accept job offers insofar as they were more flexible and had less stringent ideas about what was suitable employment. Younger, well educated and white groups were likely to be unemployed for shorter periods than others.

Despite the introduction of a battery of controls after 1994, non-whites suffered significantly greater chances of unemployment than whites in 1993/94, suggesting either racial discrimination in employers' hiring practices or prior discrimination in the schooling system whereby black suffered poorer quality schooling, or both.

The probability of unemployment fell with age, but at a diminishing rate. Incumbents might be protected against competition from (young) entrants by labour market law or institutions or firm-specific human capital. Reservation wages might fall with age or with time spent in unemployment. Alternatively, younger people might have a greater chance of entry into unemployment because of their higher degree of job-mobility. The latter was supported by evidence that younger people were mo re likely to enter unemployment voluntarily. The higher degree of job-mobility among the young was likely to be the result of their low levels of specific human capital, their relatively low current costs of unemployment and their greater ease in finding another job if they had held a job before.

The incidence of unemployment fell rapidly with education for all race groups but its effect was statistically significant only for African and coloureds. For example, possessing higher education reduced an African's predicted probability of unemployment to nil. Among Africans, education began to matter to unemployment from junior secondary level - Africans with 8 to 10 years of education had significantly lower chances of being unemployed than those with no education.

Knight said that the research had been based on October Household Survey 1994 figures and while it might be assumed that things had improved since then, this was not borne out by a study of more recent statistics. This was probably still due to the legacy of the past and the effect of poor quality education on the ability of the youth to get jobs while those who were employed had been to some extent protected from unemployment.

On the implications for policy-making, Knight said that it appeared that education and age dramatically reduced the chances of unemployment. A policy choice could therefore be made to upgrade education and skills training in poorly educated groups, but this was unlikely to address the problem. Unless more jobs were created, upgrading the education of, particularly blacks, would at best change the composition of employment in their favour. Decisions about whether education was the best cure would have to be based on proper cost-benefit analyses and not just because it could reduce employment.

The discussant, Haroon Bhorat of the University of Cape Town, said he was disappointed that the researchers had not used the 1995 OHS dataset, which had shown, for example, that the longest average period of unemployment was between one and three years. Using this could have changed some of the conclusions used and dealt more effectively with the debate on whether not unemployment was being overestimated. The 1995 dataset did a much better job of cleaning up the statistics on those people on the periphery by differentiating between the marginalised and the unemployed.

In addition, sufficient work had been done in South Africa on labour demand to have made the paper fuller. For example, they had argued that unemployed women were more likely than men never to have been employed. This has been linked to less flexibility among women and high reservation wages, which were plausible "textbook" arguments but if one looked at the distribution of education among women and men based on race and gender, that would provide a better answer. They could also have linked supply and demand issues more closely in their assertion that if there was a scarcity of educated labour, more educated people would be more likely to quit voluntarily. That might describe what happened in the top end of the labour market, but demand side analysis had shown that there was increasingly a demand for higher skilled workers and more educated labour. In fact, there was a shortage at the top end.

On education, the issue of the quality of education could have been developed further by looking at issues such as teacher-pupil ratios and quality and distribution of textbooks and the fact that even under the new dispensation, the quality of education offered to Africans was inferior to that given to white pupils.

Treating education as a homogeneous product, particularly at the tertiary level, was problematic as the different degrees offered were not in equal demand in the job market. Whites, for example, were more likely to study engineering and science and therefore were in greater demand.

Kingdon accepted that more up-to-date data could have been used but said that there was not much difference between the 1994 and 1995 OHS data but some 1997 data had been included.

EFFECTS OF FISCAL, MONETARY AND EXCHANGE RATE POLICY ON THE STRUCTURE OF SOUTH AFRICAN GROWTH AND EMPLOYMENT
J. Dirck Stryker, Balakanapathy Rajaratnam and Faud Cassim

The impetus for this research came from a growing realisation that, in considering the employment problem in South Africa, greater attention had to be paid to the macro-economic dimensions of the demand for labour.

BACKGROUND

Most of the current problems of poverty and unemployment in South Africa were inherited from the apartheid era. Racial segregation resulted in a highly segmented labour market, which reduced both efficiency and equity. Black workers were not free to move from sectors, occupations and locations in which wages were low into those sectors where wages were higher. The result was a significant disparity in wages and income.

Once restrictions on the rights of black people to unionise were lifted in 1979, resulting in a rapid growth in union membership, real wages of blacks in manufacturing rose about 50% while the wages of white workers remained relatively constant. This enabled blacks to "catch up" with whites and overcome some of the discrimination of the past.

But it also occurred at a time when the demand for lower skill levels, in which blacks were heavily represented, was falling, while that for higher skill level positions, dominated by whites, was rising. With stagnant demand and a black labour force growing at about 2.8% a year, rising wages for black workers contributed to growing unemployment. By 1995, 50% of black workers were without formal sector employment.

The situation would not have been so bad if the employment gap had been filled by rural agriculture or the urban informal sector, as it has happened in most of sub-Saharan Africa, but once again the legacy of apartheid was felt. In rural areas, land had been very unevenly distributed while the government had systematically encouraged capital-intensive agriculture and discouraged subsistence farming. This left many black people crowded into the "homelands" with land resources totally inadequate for their needs.

Thus it was no accident that the 1991 population census found that, in all the homelands, black unemployment rates were higher and had risen more sharply over the previous decade than in the rest of South Africa.

Nor was the urban informal sector a better employment cushion. In the cities and towns, the relatively low level of informal activity reflected the restrictions that were placed on blacks in a whole range of urban activity. The Central Statistical Service (CSS) estimated that in 1989, less than 20% of the black labour force was involved in statistically unrecorded activities, of whom 12% worked on a full-time basis.

Employment growth was also limited because agricultural and manufacturing production was protected from imports by high tariff and non-tariff barriers, and capital flows were highly restricted, discouraging the importation of private capital. This reflected both sanctions imposed by the international community and the isolationist "go it alone" attitude of the apartheid government. The end result was a failure to renew ageing equipment, growing obsolescence of technology and a management ethos that was increasingly isolated from new ideas in relation to the evolving global economy.

Over the years, the heavy reliance on exports of gold, platinum and diamonds led to an overvaluation of the rand in relation to what the exchange rate should have been if there had been a more diversified export base. Protection against imports also resulted in further over-valuation, as well as a bias against exports and in favour of import-competing activities.

As a result, many South African products were not competitive in neighbouring countries or on the world market. To make exports competitive, the government relied on cash rebates to exporters under the General Export Incentive Scheme (GEIS), which was highly biased in favour of larger, less labour-intensive firms.

RESTRUCTURING BEGINS

The post-1994 government committed itself to reopening the economy and joining the newly created World Trade Organisation (WTO). This had a number of important implications. These included a cut in tariff rates, which were at very high levels, as well as a simplification of tariff rates, the elimination of quantitative restrictions on trade, and the replacement of GEIS with supply-side measures consistent with WTO membership.

The result of these reforms was a "cold bath of competition" from imports pouring into the country. Especially hard hit was the clothing and textile industry, which had been highly protected before. Even though it had a somewhat longer transition period than the rest of the economy, it had to undergo a very painful adjustment.

Throughout the economy, firms had to cut costs and become competitive. This led to the laying off of workers and the rehabilitation or renewal of equipment. On top of all this, there was a continuation of the long-term decline in sectors such as agriculture, mining and construction that had traditionally employed a considerable amount of low and semi-skilled labour.

To compensate for trade liberalisation, the South African government announced its intention to introduce WTO-friendly "supply-side" measures to lower costs and move toward higher value-added production. The old Regional Industrial Development Programme (RIDP) was replaced by a new tax-based incentive scheme linked to human resource development, labour absorption and regional and sectoral priorities. Tax and other incentives were provided through accelerated depreciation allowances and tax holidays on new investment and through a number of special programmes to encourage industrial innovation, strengthen the relationship between industry and educational institutions, facilitate access by firms to needed technologies, promote productivity increases and develop best practice work organisation.

Special programmes were developed for small, medium and micro-enterprises (SMMEs) to help them access loans and other supply-side incentives.

The initial attention on cross-cutting programmes shifted in 1996 to sectoral and cluster studies conducted by the Industrial Development Corporation (IDC) and the Department of Trade and Industry (DTI) to identify clusters of industries that could become competitive or non-competitive because of trade liberalisation. A key issue was the extent to which more labour-intensive small and medium enterprises would be encouraged through general incentives or by specific incentives geared to promoting clusters of activities in which they might play a role.

It was recognised that this shift called for a depreciation of the real exchange rate, which was partially welcomed as it would soften the blow resulting from tariff cuts. But it was also recognised that lower restrictions on capital flows ran the risk of an outflow of capital, which could depreciate the rand beyond levels needed and severely disrupt the economy. This prompted the Reserve Bank to maintain high interest rates, partly to discourage capital outflows as capital restrictions were weakened, and partly to encourage inflows of capital to finance the current account deficit that was anticipated, at least in the short run, as a result of trade reforms.

Interest rate policy was also used to dampen inflation, which was of concern because of unsustainable fiscal deficits, which had reached 8% of GDP by 1992/93. Thus a critical element in the Growth, Employment and Redistribution (GEAR) strategy released in 1996 was to reduce deficits to no more than 3% of GDP to take pressure off monetary policy, lower interest rates and stimulate growth and investment. It was also believed that fiscal prudence would encourage foreign investors who might be interested in investing directly in South African industry and agro-industry.

Although there was some move towards tax reform, the main thrust of reducing fiscal deficits fell on the expenditure side. It was believed that tighter control over spending would not only relieve inflationary fiscal deficits but would also release resources required for capital formation. This was to be achieved through a restructuring of the public service, holding the annual increase of the government wage bill to no more than 2% and strict containment of spending on other goods and services and on current transfers. This would allow an increase in discretionary spending of capital nature within the government's Reconstruction and Development Programme (RDP) of up to 8% a year.

Critical to this programme were reprioritisation within the health an education budgets, expenditures on municipal infrastructure, restructuring of the welfare system, land reform and small business support policies. The other main element of the government's reform programme involved labour market policies. These sought to provide greater flexibility in wage determination and conditions of employment at the same time that basic protection of workers was extended to a larger portion of the economy.

There was to be a continued promotion of productivity improvements aimed at increasing the skills of a broad spectrum of workers in both the formal and informal sectors. The major instruments of this policy were the Labour Relations Act, the Basic Conditions of Employment Act, the Skills Development Act and the Skills Development Levy Act.

However, all these measures failed to stimulate a high rate of economic growth, did not favour SMMEs and did not create the jobs needed.

MACROECONOMIC POLICY: GEAR

The GEAR strategy was firmly committed to the achievement of macroeconomic balance, a lower budget deficit and a lower rate of inflation. It was also aimed at getting the economy onto a 6% growth path by the year 2000, driven by improved performances in fixed investment and non-gold exports. A third important objective was redistribution through job creation resulting from macro-economic growth and labour market reforms. There were also to be attempts to increase access to social services by changing priorities and improving efficiency.

Job creation was to be achieved in three major ways. First, economic growth would account for about one-third of increased job creation in both formal and informal sectors. Second, labour intensive government programmes to build infrastructure and maintain public works would account for another quarter of new jobs. The rest of new employment creation would arise from "institutional reforms in the labour market, employment enhancing policy shifts, and private sector wage moderation."

Stronger growth of more labour intensive components of industry, helped along by shifts in industrial policy, was considered vital, as was the continuation of the thrust of economic policy towards greater openness and competitiveness within the global economy.

The challenge facing labour market policy, therefore, was to "promote dynamic efficiency, skill enhancement and the expansion of reasonably remunerated employment - while at the same time supporting a labour-intensive growth path which generates jobs for the unemployed, many of whom are unskilled and have never had previous employment."

The GEAR strategy compared two scenarios: one relating to how the economy could be expected to perform over the medium term if no policy changes were implemented; and the other relating to how the economy would perform if key policy changes were made. The following policy changes were identified as being essential for higher economic growth and job creation:
reducing the fiscal deficit and containing debt service obligations, lower inflation and freeing up resources for investment
maintaining an exchange rate policy to keep the real effective rate stable at a competitive level
maintaining consistent monetary policy to prevent inflation
further liberalising the capital account of the balance of payments
further reducing import tariffs
introducing tax incentives to stimulate new investments in labour absorbing projects
increasing the pace of the restructuring of state assets
engaging in infrastructural investment to address service deficiencies and backlogs
introducing greater flexibility within the collective bargaining system.

GEAR provided quantitative estimates for the two scenarios, with substantially higher growth expected under an integrated scenario involving the policy changes. The main driving force was seen to be government's macroeconomic strategy which was based on the premise that if the fiscal deficit was reduced, real interest rates would decline and greater investment would be encouraged and jobs created. However, real progress in reducing unemployment was only expected from the year 2000 onwards.

GEAR was sharply criticised for restricting economic growth at a level that was likely to have little impact on unemployment, inequality and poverty. It was also labelled deflationary because it called for a decline government expenditure without corresponding policy measures to promote the expansion of investment or exports.

In the event, GEAR was not nearly as successful as hoped. One reason was the global economic crisis, which hit South Africa in 1998. But even before this, it was clear that GEAR was not on track. Except for 1996, real GDP has consistently grown more slowly than projected while formal non-agricultural employment continued to decline as South African firms shed labour in order to become more competitive.

Growth of real wages in the public sector was even more restrained than in the private sector. This helped halve the size of the budget deficit from 4.9% of GDP in 1995 to 2.5% in 1999. This did not, however, lead to the expected increase in investment by the private sector with the real gross fixed capital formation by business falling to -4.4% in 1999. This could have been due to high real rates of interest with the overdraft rate (minus inflation) climbing to a peak of close to 16% in 1998 and never falling below 12%. The ratio of gross domestic investment (GDI) to GDP continued to fall to its current low of 14.6%, well below the 27% attained during the 1970s. The ratio of gross domestic savings to GDP was even lower, reaching an all time low of 13% in the fourth quarter of 1998. The government's broad share of gross domestic fixed investment

(GDFI) was about 12% compared with 25% in 1986 and its share of net foreign direct investment was only 1.2%. Although net FDI showed sizeable fluctuations from year to year, gross inflows of FDI showed some improvement but was dwarfed by portfolio and other types of foreign investment which were much more susceptible to short-term shifts in capital flows.

Gold exports continued to fall in absolute value and as a percentage of total exports, while non-gold merchandise exports rose to about 30% of GDP compared to 16.7% in 1995. Most of this increase was in chemicals, iron and steel and non-ferrous metals, all sectors that employed relatively little labour. The export performance of manufacturing was particularly disappointing with growth falling from 10% a year in 1995 to 0% in 1999. This was despite an almost continuous depreciation of the rand. Despite the poor export performance, the current account deficit was been kept within reasonable limits in relation to GDP.

Aside from the effects of the global financial crisis, GEAR appeared to have been overly optimistic with employment creation and other targets not being met. Employment in the formal sector had in fact been declining rather steadily, which was a real source of concern given high unemployment levels.

The question therefore arose whether an alternative set of macro-economic policies might have done more to simulate growth, especially in sectors and among firms that were more labour intensive. Such firms were likely to be smaller in scale and located in sectors that had a comparative advantage in low labour costs. This suggested that it was important to lower the real rate of interest for firms that depended heavily on bank borrowing and allowing the real rate of exchange to seek its equilibrium level in the face of the fundamental changes that were happening in the South African economy.

The latter was seen as especially important given the decline in world gold prices and recent reforms in South Africa's trade policy. Falling gold prices suggested the need to reallocate resources into other sectors such as the production of non-tradables, import competing products and non-gold exports. The best way of achieving this was through the depreciation of the real exchange rate. The lowering of tariffs and the elimination of non-tariff barriers had a similar effect on the balance of payments.

AN ALTERNATIVE PERSPECTIVE

The nominal value of the rand in terms of the US dollar depreciated fairly continuously after 1988, but the real effective exchange rate (REER) of the rand appreciated with some fluctuations between 1985 and 1992, after which it fell. By the beginning of 2000, it was approximately 19% below its peak value seven years earlier. This was during a period when the price of gold on the world market fell by 23% and South African markets were opened wide to increased competition from abroad. The combination of declining terms of trade, tariff reductions and trade liberalisation required a substantial depreciation of the REER to restore equilibrium. Whether this was sufficient remained uncertain, especially given the fact that the REER today was approximately at the same level as in 1985, when gold exports were more robust and imports more restricted.

At the same time, interest rates were allowed to rise, with an adverse impact on business, especially the smaller firms which were unable to take advantage of supply side incentives to the same extent as larger firms. This was partly due to the fact that the Reserve Bank used monetary policy to not only promote domestic monetary stability but also to influence capital flows and the balance of payments. One reason for this was the liberalisation that was taking place on the external capital account, raising fears of a capital exodus.

The vulnerability of the South African economy to short-term capital outflows was especially acute because of the choice made by the government to finance its borrowing needs through issuing domestic bills and bonds rather than through external borrowing. This has had the advantage that debt service payments denominated in rands have not risen with the depreciation of the currency. On the other hand, however, it has had the disadvantage that it made the economy more vulnerable to the vagaries of short-term capital movements prompted either by exogenous forces or by uncertainties regarding the future pace of the depreciation of the rand. At the beginning of 2000, the loan debt of the government totalled R390.5 billion, of which 93% was in the form of government bills and bonds denominated in rand and less than 7% was denominated in foreign currency. Of the total domestic loan debt, R208 billion was held by the non-monetary private sector, an unknown proportion of which was made up of non-residents. Other outstanding public debt consisted of the bonds issued by local authorities, public enterprises and other public sector borrowers amounting to about R74 billion. Other relatively liquid capital consisted of stocks and bonds issued by the private sector, as well as bank deposits.

Although the value of liquid capital in South Africa that could be shifted abroad was sizeable, it also appeared for the most part to have been relatively stable, at least in terms of annual changes. Movements of other forms of capital were somewhat more volatile, though smaller in magnitude. There was not a large overall outflow during the 1998 financial crisis. There was a sharp decline in the inflows of portfolio capital in the last half of 1998 which, coupled with the persistent purchase of portfolio investment abroad, resulted in a net outflow of portfolio capital. The decline in portfolio capital inflows led to an increase in the nominal rate of interest on treasury bills from 16% in the second quarter of 1998 to 21.6% in the third quarter. During the same period, the rate on bonds rose from 14.6% to 18.3%. The predominant overdraft interest rate, which most affected business, rose at the same time from 21.1% to 27%, averaging 23% in the fourth quarter before falling fairly steadily in 1999 to reach 15.5% in the fourth quarter.

The Reserve Bank's official money market lending rate, or rate on repurchase transactions, rose by more than 700 basis points between April and August 1998. This was a clear signal that the bank was using restrictive monetary policy to stabilise the foreign exchange market and prevent a continuous spiral of depreciation and price increases from developing.

In the process, however, a major part of the burden of adjustment was thrown on those dependent on borrowed capital. As a result, GDP fell in the third quarter of 1998, especially in the goods-producing, or tradeables, industries because of the slackening of demand.

By attempting to defend the rand at a time when most speculators were betting against it, the Reserve Bank undoubtedly increased the degree of uncertainty regarding future depreciation, and thus the risk premium associated with holding South African securities. This made the use of monetary policy less effective than it would have been if the rand had been allowed to depreciate as a result of market forces. Such a depreciation would have increased the cost to foreign investors of selling their portfolio assets and converting the proceeds into foreign currency. This would have helped dampen speculative outflows and would have meant that less of the adjustment would have had to be made in the domestic economy. There would have been some impact of depreciation on the real economy and on inflation, however, and this had to be weighed against the disadvantages of allowing depreciation to take place. In the end, the rand did depreciate but in a pattern that was difficult to predict and unlikely to reduce the risk premium associated with holding rand-denominated portfolio investment.

How much further the rand would have fallen if the Reserve Bank had not intervened was not clear, as was the impact that this would have had on the outflow of capital, inflation and GDP. What was clear was that the growth of GDP and of employment over the last five years had been far below the predictions of GEAR. This would seem to be at least partly attributable to the rising real rate of interest over the last 15 years despite the progress made in cutting back on budget deficits.

SMALL, MEDIUM AND MICRO ENTERPRISES

The promotion of SMMEs was considered to be a key element in the government's strategy for employment creation and income generation. The impact of GEAR policies and interest rates on expansion and subsequently employment seemed to be different and related to size of the firm.

This was examined in the donor-funded Equity and Growth through Economic Research/Public Strategies for Growth with Equity (EAGER/PSGE) project, which defined large firms as those employing more than 50 employees and small firms as those employing less than 50. It looked at the user input/output analysis to examine the direct effects and total effects for 44 sub-sectors.

On average, it was found that the labour intensity of small firms was higher in two-thirds of the sub-sectors. This had a very important message in terms of employment creation and also the fact that the small firms had an advantage in the sense that, in terms of direct output, they had created employment of 7.06 versus 6.72 workers per R1 million of direct output. The effect was even more pronounced when both direct and indirect output were taken into account, where it moved to 14.48 as compared to 12.91 for large firms.

This indicated that small firms were essentially more labour intensive, and did have a much larger role to play in employment creation.

However, many factors, including the constraining effects of interest rates, seemed to be felt more at the SMME level than at the large firm level. There was not much data on this but recent research by the World Bank in the greater Johannesburg Metropolitan area into small firms and large firms, had found that 44% of SMMEs with between 20 to 50 employees, relied more on bank capital and were more constrained by high interest rates.

Approximately two-thirds of the SMMEs had borrowed from a bank over the past five years. So high interest rates did have a definite and profound impact on them.

Various supply side measures had been initiated by both the Department of Trade and Industry and its sister organisations, Ntsika and Khula. These were supposed to offset the detrimental effects of GEAR by providing a supply side measures, but it appeared that only 10-20% of SMME's were aware of the programmes, and an even lower percentage had actually made use of the programmes.

All this suggested that lower interest rates, in addition to political stability, were among the most important actions SMMEs believe that national government could take to aid them.

DISCUSSION

The discussant was Brian Khan, head of monetary policy at the Reserve Bank, who emphasised that he was speaking in his personal capacity. He agreed with the basic thrust of the paper that high interest rates were bad for investment and would affect firms that needed access to credit from banks. However, he took issue with the view that real interest rates had been climbing uninterruptably in South Africa for the past 15 years. What had been lost in the analysis had been the extremely wild swings in both the real exchange rate and the real interest rate.

In the early 1980's for example, interest rates went from -10% real to +10% real in a matter of a few months. This highlighted the fact that there had not been a clear interest rate policy. In the longer term, the early 1980s was a period of highly negative interest rates, which then moved into highly positive terrain until the mid 1990s.

Real interest rates started rising again during the 1998 crisis but had come down since then to levels of around 6% or 8%, depending on which deflator was used. If one used the CPI it was slightly higher than if one used the CPIX. So, it was slightly misleading to say that real interest rates had simply gone up. They had been highly volatile, but there was no doubt that they had been coming down.

Also, to say that the Reserve Bank favoured monetary stability or financial stability, missed out on a lot of regime changes that had taken place in monetary policy over the years. Since the early 1980s, the objective of monetary and exchange rate policy had not been a consistent one, and had changed quite a lot, sometimes to protect the gold mining industry and sometimes to protect the balance of payments, particularly during the financial sanctions period. At other times, the policy had changed explicitly as an anti-inflation measure, and there was a lot of chopping and changing throughout these regimes.

Now, South Africa had a totally different monetary policy regime in which it was targeting inflation. This meant that the Reserve Bank was far more constrained than it had been in the past, notwithstanding its so-called independence in terms of the constitution.

It was constrained in terms of having to achieve an inflation target that was set outside the Reserve Bank, and Khan said it would have been interesting to hear the authors' views on how this could affect matters in the future, and what the objectives of the Reserve Bank should be with respect to growth within that framework.

Khan agreed that the treatment of the crisis period had probably been an "overkill" in terms of raising interest rates, but it was important to distinguish between the treatment of interest rates during a crisis period and what the normal longer term objectives of monetary policy were. He was not quite sure, however, what the authors' problem with the real exchange rate policy over the last few years had been. The highly variable real exchange rate had made exporting a lot more hazardous and uncertain, but there had been a real depreciation since 1993. One could not simply look at the situation in 1985 and compare it with that in 1995 and say that the Rand was overvalued.

This was because 1985 was a period of major crisis with financial sanctions and the real exchange rate was quite clearly a major overshooting. On the issue of foreign borrowing, Khan said that while the Reserve Bank would be very pleased if the government undertook more long-term borrowing because it would reduce the net open foreign exchange position, he was not sure whether he could agree that a strategy of major long-term borrowing would reduce vulnerability to foreign capital significantly.

Firstly, if one looked at the bond market, it had developed historically and there was no way out of it now. It existed. He doubted whether South Africa would be able to raise capital in the quantities that the authors implied would protect it from volatility.

There was no doubt that the fact that non-residents held domestic bonds made South Africa more susceptible to exchange rate volatility and crises. But he was not convinced that it would be able to substitute those sufficiently to get it out of that volatility situation. Also, as it borrowed more and more, the price of borrowing would increase, the maturities would get shorter and, if there was another crisis, it would land up with a different type of debt crisis.

If it did manage to get vast amounts of long-term foreign capital to finance the fiscal deficit, it might not be so vulnerable to outflows, but the real exchange rate would appreciate and the paper presented at the forum would have been very different. The authors would be criticising the real exchange rate policy on the basis that the real exchange rate was too strong.

This was similar to the kind of "Dutch Disease" that was caused by foreign aid in developing countries, where foreign aid came in, appreciated the real exchange rate and then impacted on growth and employment.

Khan said he was very surprised by the survey finding that high interest rates in 1998 were cited by 38% of SMME's as having prevented their expansion or inhibited their ability to repay old or acquire new debt. That only 38% of firms were affected by a prime overdraft rate of 27%, which effectively, at that time, was a real rate of 18%, was a surprisingly low figure. Rajaratnam said the survey of SMMEs had been done in November 1999 and would have been higher if it had been done in 1998.

Johan Fedderke of the University of the Witwatersrand said he had been struck by the fact that the authors appeared to believe that the choice was between either having financial stability or having economic growth. The overwhelming balance of evidence in modern macro- economics suggested that stability was needed in order to get growth, and this was what South Africa had been trying to achieve macro-economic stability in order to promote growth. A crucial plank in that approach was getting into a position of being able to control inflation given the well-known negative impact of inflation on long-run economic performance.

He also believed that it was misleading to look at only the aggregate investment performance in the South African economy because, during the course of the 1990s, there had been a great deal of evidence to suggest that what was actually happening was a very substantial restructuring of the patterns of investment expenditure. In the process, sectors that had formerly been quite small, predominantly in the manufacturing sector, were now showing extremely high investment rates.

This could, in fact, be interpreted as a measure of the success of the new policy orientation. Capital flows were being re-allocated away from traditional sectors which had absorbed a lot of capital and which were largely state-led in investment performance.

The evidence on the South African economy was overwhelmingly that what was particularly important for long run investment expenditure, and for both long-run and short-run capital flows, into and out of the economy, was, in fact, uncertainty. And uncertainty was measured in any one of a number of different dimensions, one of which was the volatility of some of the factors that Kahn had mentioned.

Dipak Mazumdar of the University of Toronto said that while the employment per unit of output in the smaller firms had to be larger than in larger firms, he had found the differential to be less than in many others.

THE MACROECONOMICS OF JOB-CREATING GROWTH

Michael Sampson, Economic Policy Research Institute (Cape Town) and Williams College Center for Development Economics (USA)

South Africa's recent experience with formal sector job losses raised serious questions about the notion that economic growth, capital investment, wage restraint and improved labour productivity were enough to generate jobs.

What had been observed instead had been jobless growth with rising capital-to-labour ratios demonstrating that investment could replace, rather than create, jobs. Even wage restraint and improved labour productivity could not ensure adequate job creation given South Africa's weak substitutability of labour for capital.

Indeed, it could be demonstrated that low wages and poor rates of social infrastructure could create a severe trap, contributing to low employment levels and stagnant growth. Efficient social infrastructure investment could play an important role in promoting economic growth while improving distribution in countries characterised by severe inequality. Large-scale consumption-oriented redistribution might be sustainable and ultimately unproductive. Yet attempts to maintain the status quo could foment severe political and social unrest, and lead to economic stagnation.

Accumulated infrastructure investment such as access to high quality investment, effective mechanisms for ensuring public health, affordable housing integrated with efficient mass transit systems and the like complemented labour and private capital in the production process. In addition to increasing overall productivity, these assets improved social welfare independently of their contribution to the production of market goods and services.

Social infrastructure investment, however, had to be financed, usually through taxation or budget deficits. In a closed economy, the resources came at the expense of consumption or private savings, while an open economy allowed the option of external borrowing. These costs, compounded by the dead-weight loss of distortionary taxation, could undermine the positive growth effects of social infrastructure investment. An optimal policy would balance the positive growth and distributional effects of social infrastructure investment against the full economic costs imposed by taxation and/or increased indebtedness.

AVOIDING THE TRAPS

Economic activity depended on both capital and labour, but the productivity of these factor inputs depended not only on the technology available, but also on the level of social infrastructure investment and the wage rate. Greater levels of social infrastructure investment and higher wage rates increased both labour and capital productivity, although with diminishing marginal returns.

Firms maximised profits by choosing the quantity of capital and labour to employ given the policy-influenced market wage, the cost of capital, the social infrastructure investment climate and the structure of taxation.

Firms were individually too small to have a significant impact on the average wage. While raising wages collectively might improve productivity, no firm individually had sufficient incentive to increase them to the optimal level because many of the productivity benefits were diffused throughout the economy and were not appropriated exclusively by the wage-increasing firm. If it held its wage and tax bill constant, a firm would employ more labour and capital the greater the level of social infrastructure investment was, and the higher the average wage was (the productivity effect). However, the higher the firm's own tax and wage bills while social infrastructure investment and the economy's average wage remained constant, the less labour and capital the firm would employ (the profit effect). Both social infrastructure investment and wages improved factor effectiveness in a number of ways.

Higher wages and social infrastructure investment contributed to improved resource distribution, reducing social tension and economising on capital inputs through fuller use because of fewer strikes and more opportunities for extra shifts.

Higher wages and public investment in health and education contributed to higher labour productivity and the generation of capital-saving innovations. Finally, the improved distributional effects of higher wages and increased social infrastructure investment increased expected returns to capital by reducing political risk.

At the macroeconomic level, the government weighed the trade-offs between higher taxes and greater social, infrastructure investment, and output levels depended on the resulting optimising behaviour of the private sector. Government might optimally choose taxes and social infrastructure investment levels that were higher than those levels associated with maximum national income, assuming tax-financed social expenditure had positive distributional effects.

Fiscal policy was developed in two stages - an overarching medium term policy rule that defined the budget constraint, and a subordinate decision with respect to tax rates and social infrastructure investment expenditure. Mobilising the necessary resources disproportionately through taxation, might preclude borrowing for high return social infrastructure investment projects.

If social infrastructure investment was too low, an economy could find itself in a trap that was characterised by poor social infrastructure investment outcomes, low labour productivity, high measures of inequality and relatively low wages. But even high levels of social spending could have a negative effect if it was spent inefficiently.

The relationship between the average wage level and national income was similar to that for social infrastructure investment. Higher wages could support increasing productivity, but with diminishing returns, while exerting negative effects on profits. Any one firm that raised its wages paid the full costs of the increase, but reaped only a fraction of the benefits of increased productivity and social cohesion felt by the larger community.

The low wage trap resulting from individual firm profit-maximisation decisions was neither income-maximising nor socially optimal - and high wages might actually increase profits. Because of the public nature of wage increases, only co-ordination could achieve the higher wages and profits. If distributional outcomes entered into the social welfare function, the socially optimal wage would be greater than the one associated with maximum national income.

Fiscal policy affected the trade-off. If government provided inadequate social infrastructure investment, the output response of higher wages might be relatively weak. Social infrastructure investment complemented wages in production in that higher wages supported increased productivity if the social infrastructure existed to convert income into tangible productive assets.

Economists frequently modelled improved productivity as increases in the marginal productivity of labour. Under assumptions of full employment, perfect competition and profit-maximisation, this led to commensurate increases in real wage rates. As a result, the labour absorption equation depended only on capital growth and the net labour-demanding impact of productivity change, which could be positive or negative. In the face of high unemployment, however, labour-demanding productivity improvements led to increased employment, and the diminishing marginal productivity of labour reduced the wage impact. Productivity improvements might be substantially higher than those measured by wage increases.

Estimates of the South African situation had found that the wage elasticity of demand, which measured the responsiveness of job creation to changes in wages, was relatively inelastic. This implied that higher wages would increase the total wage bill and labour-augmenting productivity growth would tend to replace labour rather than increase the rate of job creation. Increases in the rate of investment and/or capital-augmenting productivity growth would increase job creation if labour productivity and wages were constant. If capital investment embodied labour-replacing technology, however, the resulting labour-augmenting technological change might more than eliminate the resulting job creation.

IDENTIFYING THE PROBLEM

The low social infrastructure investment trap had three key traits:
A small degree of substitutability of labour for capital. If the elasticity of substitution was relatively small, wage changes had little impact on employment, and increases in labour productivity reduced the rate of job creation. Higher productivity was associated with rising capital-to-labour ratios.
Growth and employment were relatively non-responsive to changes in the tax structure, and relatively responsive to improvements in social infrastructure investment. Tests indicated that the South African economy was more sentitive to social infrastructure investment than to tax rates. It had significant unutilised taxable capacity, suggesting that taxes could be raised to finance social infrastructure investment with positive effect on employment and growth. The economy's recent sluggish response to tax cuts and incentives bore out this hypothesis.
There was a causal link from higher wages to productivity growth as the efficiency wage effects would be stronger for lower wages and diminish as wages increased.

POLICY IMPLICATIONS

South Africa exhibited many of the characteristics associated with the low social infrastructure investment trap. A strategy to address this problem required careful integration of fiscal, labour and industrial policies.

Some options were:

Fiscal policy

Given the existing skewed distribution of social capital in South Africa, the marginal productivity of efficiently allocated social infrastructure investment might be very high. The significant unutilised taxable capacity suggested the effects of higher tax rates might be weak. Financing social infrastructure investment through higher taxes would not only stimulate aggregate demand while supporting the supply response, but it might also shift the degree of substitutability between capital and labour in favour of job creation.

Labour policy

The poor in an economy characterised by a low social infrastructure investment trap faced very low wage employment, if any. Low or no wages reinforced low productivity, stifling human capital accumulation. Fiscal policy reforms that promoted social infrastructure investment would gradually raise wages, but more slowly than that attainable with direct labour market intervention. A phased programme of labour protection, including minimum wages for the lowest paid workers, might provide the necessary co-ordination that enabled an economy to escape a low wage equilibrium. These policies operated most effectively when complemented by appropriate social infrastructure investment and labour-demanding industrial policy.

Industrial policy

This could foster job creation by not only supporting more labour-intensive production but also by nurturing technology with a high degree of substitutability of labour for capital. Labour intensive production did not need to entail low wage activities - industrial policy that raised labour productivity while increasing the elasticity of substitution between capital and labour could increase labour intensity while improving wages.

DISCUSSION

Chris Loewald from Department of Finance said it was clear that governments could increase social infrastructure spending to increase productivity, employment and income, and overcome the decline in growth caused by an increase in taxes, which reduced consumption. Essentially, increasing taxes to pay for infrastructure spending fitted very neatly into a closed economy model.

A further argument put forward was that wages could be increased to an efficiency level. There were about four different efficiency wage theories - paying people more to prevent shirking on the job, preventing a high rate of labour turnover, ensuring as high as possible a pool of job applicants, and a fair wages theory. It had to be asked how relevant this model was to South Africa and to its policy making.

The social infrastructure trap was a very useful way of looking at economies where the tax rate was low and there was not enough spending by government. In this case, labour's ability to substitute for capital was low and this acted as a structural constraint.

It was interesting that the paper had not really covered relative factor costs, and the cost of capital. There had been a decline in the user cost of capital and rising real wage rates, which was very suggestive of employment problems in the economy and that, rather than increased productivity resulting in declining employment, real wages were driving the problem. This was particularly so because the cost of capital was falling.

The second critical assumption was the issue of efficiency wages. It would be hard to argue that efficiency wages were being paid in South Africa, but, on the other hand, there had been quite a long history of political conflict in the labour market. South African capitalists had come to understand that one way of raising productivity and improving labour relations was to pay more.

The third assumption was the profit equation, which said that profits were a function of the quantity of capital and labour, and the cost of capital and labour. This also covered social infrastructure, the investment climate and the tax structure.

What was missing was some sort of demand factor to indicate the price in quantity for the output of the firm, unless that was assumed in the social infrastructure investment climate variable. Any attempt to raise the social infrastructure investment climate variable needed to be outweighed by some change in the tax structure variable. On the other hand, this would also impact on the cost of capital and this was one of the main problems that the Treasury had traditionally faced in South Africa - that the increase in spending too much ran the danger of increasing the costs of capital. The Treasury had worked rather hard to reduce the budget deficit in order to get the cost of capital down.

Finally, Loewald said, the model would be more useful and relevant to South Africa if it were put in an open economy framework. Notably missing was any discussion of the relative factor costs, of inflation prices, the monetary side, and the nominal side of the economy. The basic problem of financing investment was obviously more complicated in an open economy framework, but that was the one most countries lived in, and so needed to be addressed. It was not purely a simple matter of raising taxes to finance an increase in government spending.

He also questioned the notion that there was a lot of unused tax capacity in the economy, and that taxes could be raised without this having an immediate negative impact on the economy.

Samson said that there were four models of the efficiency wage in industrialised countries. He had focused particularly on the efficiency wage literature as it was supplied to developing countries. A simple example was that if workers were paid enough so that they could afford safe and reliable mass transit, that would have capital augmenting productivity properties. There would be a better co-ordinated workforce and employers might have to rely less on quality control. They might even be able to run a double shift.

External open economy issues had been implicitly incorporated in his model, although he would agree it would be effective to explicitly address that. If fiscal policy was changed to make labour more productive and lower unit labour costs, this would attract domestic and foreign investment.

In terms of tax revenue, there had been a number of studies that showed that South Africa had considerable taxable capacity. If one compared South Africa to industrialised countries, it was clear that South Africa's tax rate was relatively low. One might ask whether that was a valid comparison.

If one was trying to affect the choice of international investors as to whether to locate a factory in China or South Africa, the answer would be no. But it would be relevant if the choice was between a factory in Germany or a factory in South Africa. But even if one looked at countries closest to South Africa in terms of per capita income, one found that South Africa's average tax rate was relatively low. This was a complicated issue that needed a great deal more research.

A SECTORAL ANALYSIS OF EMPLOYMENT AND WAGE DETERMINATION IN SOUTH AFRICA
Asghar Adelzadeh, National Institute for Economic Policy (NIEP)

Adelzadeh said this paper had been part of a larger endeavour at NIEP to empirically analyse the sectoral determinations of a number of variables based on data from 1970 to 1998. It formed part of changing the underlying structure of NIEP's macro-econometric model and was partly also supported by the Department of Labour as a project to look at the various scenarios for job creation at the sectoral level.

The empirical and theoretical debates to date had been rather narrow in terms of the basic understanding of the factors that impacted on employment and the wage rate, and the time had now come to look at these issues more at a disaggregated way, or at a lower level of generality, to maybe shed some light on the policy possibilities.

The aim was therefore to contribute to current research into viable and effective measures to create jobs by presenting an empirical analysis of the sectoral determination of employment and real wage rates. It highlighted policies that were found to have had a significant impact on two components of the labour market - the demand for labour and average real wage rates for sectors.

It examined the short and long term determinants of employment in, and the average real wage rates for four main production categories - agriculture, mining, manufacturing and services. These had been broken down into 38 sub-sectors, which were highly diverse sectors in terms of production techniques and skill composition. As a result, a broad theoretical perspective was used to define, compile and process a number of variables which were linked to employment and wage determination.

It was argued that it was plausible that the employment and wage rates, at sectoral levels, were not determined by a uniform set of variables. As a result, an empirical estimation was adopted that allowed for the examination of the relationships between given sectoral employment and wage rates, and various supply side and demand side variables, each of which included sector-specific and macro-economic dimensions. The relationships were consistent with a variety of theoretical views on how labour markets, specifically employment and wage rates, adjusted to changes in demand and supply and institutional factors.

A number of variables were hypothesised that could have potential impacts on one or more sectors of the economy, such as real growth, domestic expenditure, GDP price deflator as a price variable, and real effective exchange rates.

At the sectoral level, a number of variables were also used such as the real average wage rate for the sector, capital: labour ratio as a proxy for the production technique, labour productivity, sectoral labour productivity, output per unit of labour, capacity utilisation, output per unit of capital or capital productivity, sectoral output, investments, imports and exports. These exhausted all the data that existed at sectoral level.

For real wage rates, at the macro-level, use was made of total employment as a potential independent variable.

The supply side variables used could be characterised as the real average wage rate, the technique of production, represented by capital labour ratio, sectoral labour productivity, sectoral or economy wide price levels represented by the sectoral or the GDP deflator.

On the demand side, use was made of sectoral and economy wide output, imports and exports, the real growth, domestic expenditure, and capacity utilisation. The capital:labour ratio was found to be the most significant determinants of employment in all sectors, with both the short term and long term capital:labour ratios having a negative impact on employment. Investment had a positive effect on a vast majority of sectors' employment, which was not surprising.

In terms of the real wage rates, it was found that this negatively affected employment in 15 of the 39 sectors of the economy. On labour productivity, it was found that this had a negative effect on sectors such as construction, gold and other mining, tobacco, apparel, footwear, paper, glass, non-metallic minerals, motor vehicles and financial services.

On the demand side, it was found that variables such as the real growth domestic expenditure, sectoral output, import or exports were all significant determinants of employment. The first three were positive, while imports had both positive and negative effects on unemployment. Imports had a positive effect on unemployment if production depended on imports and there was a need for intermediary imported goods.

But imports could have a negative effect on employment if they involved the substitution of the domestic production for the imported goods.

In several sectors, the price deflator had a significant effect on employment. These included financial services, wholesale, retail trade and catering, furniture, coal, food, textile, paper, other chemicals, rubber etc.

Real wage rates as the determinants of employment had a negative effects in the agricultural and manufacturing sectors, but to different degrees. Capital:labour ratios had negative effects on the employment at the total economy level or at the breakdown of the total economy to its main sub-sectors. The degree was different but it was highly significant.

On labour productivity, in the total mining and the total economy sectors, there were negative effects while fixed investment had positive effects on four of the sub-sectors. Output as a measure of both fixed investment, and output and imports as measures of demand, had positive effects on employment. The GDP deflator on the economy as a whole had a significant and positive effect on employment if it was increased.

One thing that could not be established for all the sectors had been the co-integration factors.

In the gold mining sector, the real wage rate and capital labour ratio had a major significant negative effect on employment and labour productivity. On the demand side, exports in the gold sector had positive effects on employment.

In the construction and engineering sectors, a 10% increase in the capital:labour ratio led to 8% decline in employment. Fixed investment, as a demand factor, obviously had a major effect on these sectors, however, the size of the coefficients were relatively very small. If one looked at the major coefficients under determination of employment, the capital: labour technique of production in some sectors, labour productivity, was highly significant and real growth in domestic expenditure had a positive effect on textiles.

Sectoral labour productivity, capacity utilisation, profit rate, sectoral profit rate and employment were the main determinants of the average real wage rate in the majority of sectors. This average real wage rate covered not just production workers, but all employees, salaried and wages workers.

In summary, the researchers had found that there existed significant differences among sectors of the economy in terms of the determinants of employment and real wage rate in the short run and in the long run. A combination of demand and supply side factors best explained the aggregate of all sectors with specific employment and real wage rates. Inflation and employment were positively related.

On exports, they had found that they had a direct positive effect on employment determinants in only three sectors of the economy. The increasing drive toward export led growth had been accompanied by an increase in the capital intensity of production in a bid to increase competitiveness and it was not surprising that the economy was shedding, and not creating, jobs.

THE STATUS OF EMPLOYMENT IN THE SOUTH AFRICAN CLOTHING SECTOR - DIVERTING A "RACE TO THE BOTTOM"

Keryn House and Augustine J Williams, Department of Trade & Industry, South Africa

The story of the status of employment in the South African clothing industry, as told in the media, was one of a shrinking sector characterized by downsizing, retrenchments and the closure of factories. But the authors contended that there was actually a vast amount of hope for this sector. Strategies could be put in place to avoid the "race to the bottom" which was already evident in some parts of the industry. It was one of the most labour intensive industries in the world and employed a large number of women, and had been undergoing significant changes in the nature of employment, which was an important potential threat to the sustainable growth of employment in this sector.

Progress in steering the sector in the right direction had already been made through the clothing sector summit, which was the outcome of the presidential jobs summit. The summit ended with an agreement between labour, business and government on the way forward.

After wide consultation with small and big firms in the sector, the authors had found that there had been a great deal of pressure on them by retailers to lower prices. This was the "race to the bottom" and it had been exacerbated by imports. Manufacturers had responded by reducing staff levels and outsourcing to smaller firms. In the process, formal manufacturers had moved into the informal sector, de-registered from the bargaining council and become sub-contractors.

In order to survive the downward pressure on prices, manufacturers were also looking at other markets, which made export strategies and market access increasingly important. The US's African Growth and Opportunity Act (AGOA) therefore held a great deal of potential for the sector. Competitive positioning, specialisation, design, niche areas, environmentally friendly products and the like had become very important while manufacturers had to factor in the fact that South Africa had high labour standards.

All this has changed the power of retailers and manufacturers, especially the large ones, now had another way of surviving through exports. Small business, in the meantime, was thinking of how it could survive by serving the local market. In the process, a new relationship was developing between small business and retail through hubs, trading houses of firms working together to supply retail and the development of pre-production units.

On the investment side, Transnational Corporations based in Asia were setting up platforms around the world to manufacture best for markets such as the USA. In South Africa, they were establishing themselves largely in the decentralised areas such as the Eastern Cape and Free State, which was not yet covered by employment statistics.

Firms were also exploring various forms of specialisation in view of the fact that they could not manufacture commodities very easily unless they had very efficient high volumes, an area in which the Transnational Corporations were strong. As a result, many firms were working as design houses in many ways, outsourcing to small business and doing the marketing design.

The implication of all this was that there was good job growth potential here. But on closer inspection, what was happening was the fragmentation of manufacturing. It had to be asked how the firms could harness huge export volumes, such as 80 000 dozen units of one T-shirt for the US market. No small manufacturer could handle that. There were two options that could materialise, apart from the fact that the Transnational Corporations would be able to cope with those volumes. Most of the Asian manufacturers came to South Africa with established markets, and all they did here was set up a platform with the origin rules specified in AGOA. They were setting up a whole value-added pipeline covering textiles, spinning, weaving and clothing.

Of concern, however, were those manufacturers who were fragmented. Ways had to be found to help them deal with the major change towards export growth. One option was for them to pull back their outsourcing and build up their capacity again. The other was for them to go for totally new expansions and leave the outsourcing trend to the local market.

The researchers presented an empirical analysis of employment and investment trends in the clothing sector, which was classified as knitwear with the standard industrial classification of 313 and clothing with a standard industrial classification of 314.

Data was requested from the supply side programme run by the Industrial Development Corporation and the manufacturing development programme in the DTI. The latter included the SMMDP's foreign investment grants, as well as the programmes that had been in place as from 1994 onwards. Common fields were used in order to merge the data on an annual basis from 1994 to 2000. The authors examined the provincial spread of new investment projects within the clothing sector, the relationship between employment and investment, investment in the knitwear and clothing sector, and the role of foreign and local investment.

In 1996 and 2000, the clothing sector received the most new investment projects at 56 and 55 respectively. The lowest number of projects was in 1997 at 30 projects. In knitwear, the highest number of new projects was 19 in 1995,1996 and 2000 respectively. The lowest number of projects was 7 in 1999.

KwaZulu-Natal took the bulk (39%) of the new investment projects in the clothing and knitwear sector. Together, KwaZulu-Natal, Western Cape and Free State took about 75% of the new investment projects. The other 25% was spread among the other provinces with Gauteng getting 5%, Eastern Cape 11%, Mpumalanga 3% and Northern Cape 3%.

When looking at the annual spread of new knitwear investment projects, it emerged that while the number of new investments had fallen in the Western Cape and Free State, there had been a proportionate increase in KwaZulu-Natal's share of investment. KwaZulu-Natal's investments had increased from 27 in 1994 to 63 in 2000.

The provincial and annual spread of the number of new clothing investment projects also showed up the decreasing share of the Western Cape and the increasing share of KwaZulu-Natal.

The authors also looked at the relationship between employment and investment in the knitwear sector. Initially, it looked as if there had been a positive relationship between employment and investment, but in 1999 there was huge amount of knitwear investment (R393.9 million) while the employment increase was negligible at not even 1 000 employees. A further examination of the data revealed that while the bulk of investment in 1999, or 73.7%, was between R0.5 million and R10 million, only 15.8% was in the R20 million to R30 million range. Most of the new jobs were created in the smaller projects and large investments did not tend to create a large number of new jobs. This indicated that the larger investments were more capital intensive, which indicated a need for caution when seeking new investment aimed at creating new jobs. In 2000, however, investments of between R20 million and R30 million created the most employment.

In clothing, there were 56 projects in 1996 and 55 in 2000. But the level of investment was R75 million lower in 2000 than in 1996. This meant that the average size of investment per project decreased from R5,5 million in 1996 to R4.3 million in 2000. The level of employment created was 6 388 for 1996 and
6 308 in 2000.

The discussant, Anthony Black of the University of Cape Town, said the paper had highlighted the very disparate data for the sector and that while employment was, in fact, not declining, the increases were mainly in informal and outsourced casual work. This indicated the need for more research, almost anthropological type research, to really find out what was happening in detail in the clothing industry to do with casualisation, sub-contracting and formalisation.

Mention had been made of the Confederation of Employers of Southern Africa, which included 120 000 employers employing 2.4 million people. Its main objective was to provide employer, not employee, protection under the new labour legislation. It was encouraging contract labour and also offering legal advice to firms running into problems with labour law.

The fact that formalisation was not taking place this was a worldwide trend. Labour regulations were certainly one contributory element, and this had come through quite strongly in a big investment study initiated by DTI. There were also retrenchments in the clothing industry and in other sectors, with the study pointing out that after the retrenchment of teachers, quite a few of them, especially in the Western Cape, had actually started small scale clothing firms.

And then, of course, there were higher labour and production costs. Obviously, the result for those working in these kinds of semi-formal enterprises was worse working conditions and perhaps non-existent benefits. But obviously costs were low as well.

On the investment part of the study, data was something of a problem and it was difficult to draw conclusions. But one or two trends were important, especially the growth in foreign investment and also the shift from the Western Cape to KwaZulu-Natal.

It had to be asked whether there was a "a race to the bottom" or whether what has being witnessed was the emergence of a lower cost, more flexible network with developing hierarchies. If the latter, it was actually coping quite well under very difficult conditions of low economic growth, of tariff liberalisation and perhaps also of labour regulation which was certainly posing problems for labour intensive firms and for small firms in particular. So there were some positive features.

This compared with some quite negative trends in 1991, when domestic decentralisation depended on industrial decentralisation benefits, there was rent seeking, there wasn't much training happening, there was technical change to some degree, and skills development was not really happening. Now, there was a situation in which there was quite substantial change happening in this industry, some of which was perhaps negative in the sense of informalisation and casualisation. But there was also increased involvement by foreign firms, perhaps an acceleration of technical change, less rent-seeking hopefully, decentralisation and also movement in foreign markets based on market forces.

Mauritius was often held up as an example of the way South Africa should go. The clothing industry there had undergone major restructuring and was now moving into higher value added products, including plant efficiency, training, or modern technologies. South Africa could follow suite, including a move to more informalisation and sub-contracting.

The big difference, though, was that Mauritius had seen output rising steadily. Employment grew very rapidly until about 1990. Productivity did not increase much in the first phase, but had since grown very rapidly. Real exports had grown. Real wages did not increase until about 1990 and had increased quite rapidly since then.

Another major difference was that Mauritius had a tight labour market and full employment. The industry grew extensively initially through increasing employment with very little productivity change. And now productivity was growing, and it had to be asked whether there was a trade-off between productivity growth and employment growth.

Asked why KwaZulu-Natal was attracting so much more investment, Williams said it was difficult to pinpoint one single reason for this but it appeared that producers or industrialists seemed to feel that it was a more efficient location in terms of the cost structure, and also in terms of maximising the profits.

It was also a labour abundant province that was not unionised to a large degree, and employers did not have to pay the bargaining council minimum wages, which could be an incentive.

On informalisation and casualisation, he agreed that the informal and semi-informal type of operations that existed in the Western Cape and even in the Gauteng area, most definitely had a different type of strategy of seeking to take advantage of the new negotiated market excess. Whether it was through the creation of co-ops or whether it was through order-sharing or production-sharing facilities, these operators would have to battle it out amongst themselves. The end result would differ substantially due to the foreign investors who set up shop in South Africa, which would have a definite advantage in taking up the access provided by AGOA.

House said that although the sector summit had looked at sub-contracting, there were a number of more strategic areas involved. Sub-contracting had certainly tended to get more press coverage and was one of the areas that was a very sensitive issue between labour and business. Further work was needed on this. The government had made a very strong statement at the sector summit about South Africa not becoming a "sweatshop" country. Sub-contracting was a global trend but it led to lower quality jobs in many cases, and no medical or other benefits to the employees in general. This could not be supported in the long term. However, jobs were created in this way.

Mauritius had a very different environment. It was 100% export-oriented, had a lot of foreign Transnational Corporations, which were very dominant, and actually had an over-employment situation in that it imported labour. It had now got to the point whereby it was actually looking at setting up operations in countries such as Mozambique. Because of the AGOA rules of origin, it had to use local textiles but its disadvantage was that it did not have any raw materials. South Africa had a very strong advantage there, and there was an opportunity to work together with Mauritius, which could be a very valuable vehicle for exports because it had credibility in world markets. But House said care should be taken not to take the Mauritius model on simplistically because of the very different situations facing the two countries.

In terms of the integration of textiles industries, AGOA would generate a lot of activity in textiles in Southern Africa, but the region should not rely on it too heavily. It was not a trade agreement. It was a gift and had strings attached.

ALIGNING INNOVATION FOR DYNAMIC CAPABILITIES AND SUSTAINABLE GROWTH IN SOUTH AFRICAN MANUFACTURING

Eric Wood, University of Cape Town

Wood said innovation was a vital part of economic development and growth. It involved not strictly the invention of great technologies and bringing radical new technologies to market, but, in a very broad sense, bringing new products for a particular organisation to the market.

But innovation was difficult and he wanted to examine the issue in the light of the experiences of a local company called Ziton, which had been a very successful innovator and had created an enormous number of jobs. It was still a small firm but it had sustained growth and job creation over a 30-year period.

He wanted to describe some of the management building blocks that had been used to enable it to succeed, and then describe very briefly some difficulties that it had run into in the mid-1990's, and how it responded to that. This would demonstrate the importance of the management capabilities rather than the technical capabilities, and he then wanted to very briefly look at a few comparative cases in similar industries and draw some conclusions.

Innovation was great, he stressed, but it was difficult. And it was particularly difficult to achieve commercial success. The risks of failure in an innovation project were relatively small when one looked at technical success only - in other words, did the project team actually achieve a product design that it set out to achieve? Did it succeed in whatever development was required?

The probability of commercial success, however, was dramatically low. There was a 1 in 5 chance of achieving commercial success and that was defined as achieving the projected revenue stream.

So, combined, there was a roughly 1 in 6 chance of success in innovation projects. This was based on research in the US some time ago, but there was no evidence to suggest that the picture broadly had changed very much. As a result, he drew the conclusion that one would want to put relatively more effort into ensuring commercial success - and argued that, that was largely based on management capabilities, and relatively less on the technical side, because of the relative chances of success.

Just to add to the difficulties of the low probabilities of success in innovation projects, one also had the difficulty that when, in the few examples where one was likely to succeed, or you did succeed, one would likely have massive cost overruns. And that created additional difficulties for companies trying to bring new products to market. Both large and small companies had to deal with this reality of low probabilities of success.

It was estimated that about 50% of R&D in large companies went into failed projects. In small companies, probably the best indicator was the very high failure rate, and high technology base companies were certainly not immune. It had been reported that for South African dot com companies, the current failure rate was 95%, so they definitely faced some substantial challenges. To manage that risk, he argued that there were three important factors to bear in mind, from a management perspective, if one wanted to achieve commercial success from the projects that one did succeed in.

It was generally agreed that one had to have a very strong market focus and orientation and that, for innovation to succeed, it should be aimed at big markets. Building dynamic capabilities was increasingly being emphasised as organisations moved from exploiting existing capabilities to developing capabilities, which the market would need in future. There was more and more research about the organisations managing themselves "ambidextrously", moving from exploiting existing capabilities to developing new ones, and that could create enormous tensions within organisations.

Secondly, innovation had to be embedded in manufacturing if it was to lead to broad-based and sustainable job creation. This was slightly more controversial. It was not a prerequisite for successful innovation, but if the aim was job creation,then embedding innovation activity into the manufacturing sector was absolutely essential. It could also be a very powerful means of sustaining growth in the long term because manufacturing had all sorts of interesting characteristics.

Wood said these two factors had been applied in the example of Korea, which demonstrated how important it was to focus on markets rather than on technologies. Samsung went into microwaves for two reasons - it recognized that a microwave that could cook very quickly and was a low user of power must have a big market somewhere. They realised this before the Americans did, even though the Americans invented the microwave 25 years earlier. The company that invented it had tried it in the market and, when it did not meet with much success, it dropped it. The Japanese started developing markets for microwaves in Japan, and then in the US. The US companies eventually caught on, but rather late in the day. Samsung was alerted to the microwave in the mid 1970's. It invested considerable resources into trying to develop a prototype. Its initial objective was to reverse-engineer a project, which failed miserably.

So Samsung went to other companies to see if it could license the necessary technology, especially for the magnatron, which it could not reverse engineer. It was turned down. So it did some more research on the magnatron. Eventually it persuaded the Japanese company that was manufacturing the magnatron to license the technology because Samsung was quite close to reverse-engineering it.

When Samsung finally came out with a prototype based on the Japanese magnatron in 1979 it cost $600, which was about half the average household income in Korea. It sold no microwaves. But that did not deter the company and it kept on, ramping up manufacturing. Later in 1979, it got its first order of 240 microwaves for Panama and made a slight loss on that deal. In early 1980, it got an order from the US for 3 000, and it made a huge loss on that. But that did not deter the company because it knew that if it could succeed, the market was huge and it could really make a success of it. And in about 1981, it had its first deals on which it did not lose money. The market grew substantially from there on and it passed the million mark in 1984.

Samsung now had 60% of the US market. An important thing that guided them was the size of the potential market. They knew that even if they only had a tiny proportion of that, it was worth going for. They were making huge sacrifices but they were totally focused on it, and they were not particularly interested in the technology. Any which way they could get there, they just wanted to get there, and if it was licensing, reverse-engineering, they were willing to try the lot.

The end result, by the mid 1980's, was that they were employing 10 000 people in the microwave operation, most of whom were in manufacturing. And that was the critical thing. They were employing high school leavers. So, manufacturing could create jobs for relatively low-skilled people, which was a special thing, because in other innovative sectors, particularly professional services, one tended to create very high skill level jobs, which had very little benefit to the people.

MANAGING INNOVATION AND GROWTH AT ZITON SA (PTY) LTD

Back in 1969, the founders of Ziton, Robert and Margerett Macfarlane, had a dream of becoming a world leader in fire-detection equipment. Thirty-one years later, Ziton is the smallest of 12 manufacturers globally in its product area with a global market share of around 3% and enormous potential for growth.

They had seen an opportunity to get into the fire detection industry, and this drove them. They had the vision to become a global player, and this guided them, especially through the first 10 years. They started with R500 in capital, which wasn't very significant and they couldn't do much with it. So they started importing products and installing them. They grew the import operation by distributing the imported products to other installers.

Then the crucial change came when they saw an opportunity with the established customer base to move into manufacturing. That started on a very incremental basis and in the home kitchen. Interestingly, when they employed their first design engineer after a decade, it was somebody who had never designed anything. The choice was based on his skill in manufacturing. He'd worked in the electronics manufacturing sector and they were much more interested in his ability to bring a new product into production than to design the best product.

Going global was obviously critical and happened fairly early on. The engineer that they had brought on board succeeded in reverse-engineering a product, which led to legal action from one of their Swiss competitors. They had to do a re-design, but that did not deter them. They went off to the UK 18 months later to explore the market there, and later they came across somebody who said: "What are you doing about analogue fire detection?" And they said: "What do you mean?" That engagement led to their development of the world's first analogue fire detection system in 1984.

The interesting thing about that was that it was not the basis for their getting into overseas markets. It was very important, but they could not convince the agents to take a sophisticated product from a South African company. Instead, they had to sell the previous reverse-engineered technology, which was much simpler. This emphasised the point that great technology did not sell itself. In fact, it could be more difficult to sell a great technology than it could be to sell a simple technology. It took them some time to convince the agents overseas that they were capable of producing reliable products before they took the advanced technology.

Then, they deepened their skills in three particular areas - in marketing and technical support, in product design and in manufacturing. The marketing and technical support was vital. They set up 200 dedicated agents overseas and they worked very hard at building up the reputation of those agents. The agents were very committed to them and to getting and identifying information from users and potential customers to feed back into product design. Their product design was very focused on the particular needs of overseas market.

They deepened their design and development capability. There had been a rapid growth in the engineers employed in this sphere and they had been successful in winning some government support, recently through the Support Programme for Industrial Innovation (SPII). They had also won several awards.

All this enabled them to grow the proportion of the proprietary products in their range, which now stood at 80%. The critical thing was that they had learnt how to manage high-tech engineers, who were motivated by, as they say, "pushing out the envelope". They could get very excited about technology, which could be dangerous in that they could go overboard and miss the importance of speed and delivering exactly what the customers wanted. The management capability to manage those people effectively had to be developed over time and incrementally.

Lastly, in production, they had developed very sophisticated process technology capabilities and were able to design their own equipment or, where appropriate, bring in equipment and adapt it to their particular environment. Those capabilities were recognised by their overseas competitors, who chose to source from the company here in South Africa instead of producing themselves.

But, in the mid 1990's, they faced a major crisis. A competitor from the UK introduced a novel sounder, or siren, which could be connected to the same wires as the fire detectors. Ziton's directors saw the product at the time of its launch, investigated it and decided to turn it down because they did not think it was going to be important in the market, but it was. Within a matter of months, their agents overseas were saying they were going to go out of business if Ziton did not produce the new sounder.

One particular agent put in a bid for a hospital contract with a sounder and won the contract, subject to being able to deliver the sounder. Ziton was given a six-month delivery time period. This forced a hugely complex and difficult period in the company because it had to invest all its resources in developing this new product and bringing it into production. This process exposed a huge number of shortcomings in the organisation, particularly the lead-time in the development of a new product. There were huge tensions and there were faults in the product, which was revised four times. They lost a whole lot of money.

But they had been able to turn the situation around and learn from the difficulties and the shortcomings that they had been exposed to. Ziton was now very much on its way to developing dynamic capabilities to remain competitive.

What really mattered for broad based sustainable job growth in this kind of experience was the management team and complementary skills, but attitude and vision was also vital and had driven this company. That vision had meant that it had been willing to take the risks of investing in new capabilities.

CONCLUSION

In today's competitive environment, no company could take its position for granted. After gaining international recognition for its product development capabilities and making rapid progress in expanding its export operation, Ziton was suddenly faced with a serious competitive threat. Responding to this threat demanded the full attention of Ziton's best managers, engineers, supervisors and shopfloor staff, so much so that months of working day and night ensured. Few staff were spared the considerable pressure and tension created by this project. It highlighted major shortcomings in the quality of communication between and within functions, perhaps most particularly in the processes involved in bringing a new product into production. Inadequacies in this area and in the development process itself resulted in a product launch fraught with problems and unnecessary costs.

This crisis appears to have been a catalyst for the organisation to make important breakthroughs in a number of areas. The quality of communication and relationships had been significantly improved in certain areas. Levels of trust had increased. There was a better understanding across the organisation of the difficulties faced by each function. Equally, there was improved understanding of the needs as well as the capabilities in different functions.

Partly as a result of these changes, substantial improvements had been made in reducing new product lead times, reducing the number of design iterations and increasing the pace of unit cost reduction.

The dynamic organisational capabilities that Ziton had begun to acquire could arguably prove to be its most enduring and defensible source of competitive advantage. This was particularly so in the light of the fact that few of Ziton's competitors combined product development and manufacturing under one roof and thus potentially faced greater obstacles in achieving dynamic capabilities.

POLICY IMPLICATIONS

Commercial, rather than technical, success was the most challenging aspect of innovation and also the only objective.

SPII, however, placed commercial success fourth on its list of criteria, which "muddied the water". Only commercial impact really mattered and the focus should therefore be on revenue, profit and jobs generated. The resources required, and the risk involved, in developing markets for a new product as well as suitable channels through which to service customers and learn from them were far larger than to develop the product in the first place. Significant numbers of South African patents, products and technologies were not fully exploited because of the vast cost and risk involved in developing overseas markets. It was quite possible that the revenue generated by every rand invested in developing overseas markets for promising, but not fully exploited, South African technologies, would be higher than for every rand invested in developing further technologies. Again, the Ziton case was instructive. Once overseas markets had been opened up and the channels put in place, the risk of every additional innovation project was dramatically lower. The overall project risk began to approach the risk of technical as the risk of commercial failure was substantially reduced.

This was not to suggest that South Africa should not invest in developing new technologies, but rather that it should invest more in developing international markets both for current and future technologies.

It had also been suggested that tax rebates for R&D would be an effective means of encouraging innovation. However, if the limiting factor was resources for developing overseas markets, then R&D incentives might not be best placed to generate revenue growth.

Public investment in innovation should be evaluated by the size of the growth opportunity and the probability of commercial success.

The export-oriented company focused on large, difficult-to-enter markets, this was the primary site of sustainable revenue growth. Being export-oriented was definitely not enough. Large proportions of South Africa's exports were in declining and difficult-to-defend industries. The focus should be on big growth opportunities, which presented realistic and achievable, technological and market goals.

This could be achieved by revising incentives to develop overseas markets for promising technologies and products already in existence. Incentives should target those products and process technologies, which could credibly succeed on a big scale in large, difficult-to-enter markets. The key would be to avoid supporting comp anies that already had export market capabilities and experience and whose products were not sufficiently well developed to have a realistic chance of competing overseas in difficult-to-enter markets.

A complete export market entry and development strategy and business plan should be a pre-requisite for any grant or financial award in support of the development of a new product. This would tend to favour existing exporters, some of which might not be best placed to expand revenues in future. However, it could be made a pre-requisite for any secondary funding. It might be worth considering changes to SPII and

Innovation Fund grants, some of which had gone to companies that had never achieved substantial international success despite years of heavy investment in innovation. It would appear to make more sense to assist them in managing the international commercialisation process rather than developing more new products.

For broad-based job creation, public investment in innovation should be evaluated by how well it was embedded in a competitive manufacturing capability. South Africa could not afford to invest public funds in developing new technologies that were not subsequently manufactured in the country

The company was the primary site of innovation activity. If it was to be sustainable and lead to the development of dynamic capabilities, innovation had to be carried out in one or more companies. It could not be isolated from real customers, real implementers and real suppliers.

Finally, don't forget attitude. The managers at Ziton were swimming against a tide in South Africa, where managers usually gave one 101 reasons why one should not bet on local manufacturing jobs. They would rather do it somewhere else, or import it from overseas. Policymakers should make job creating heroes real heroes. In America they were not ashamed to do this. They did it in a big way, they put them up on pedestals, put them on television, they told their stories, they learnt from them.

DISCUSSION

The discussant, James Hodge of the University of Cape Town, said the paper reaffirmed the link between technology and employment growth. Some recent research had tried to suggest that technology was destroying jobs. This approach overlooked the fact that technology had a dual role of both creating jobs and destroying jobs as productivity increased. A lot of decomposition studies had laid the blame squarely on the shoulders of technology, showing that demand was improving employment growth while trade was having a neutral effect. The authors of those studies often forgot that technology might be driving demand growth and export growth while limiting some import penetration.

Wood had shown that technology could create growth but it could also bring out the difference between product innovation and process innovation. The early parts of Ziton's success was built on introducing a new product while the more recent changes in technology had been much more focused on cutting costs and, as a result, cutting jobs. Job creation had levelled off as price in a mature market became more important.

Hodge disagreed with the view that innovation in services was not important for job creation. Most jobs were created in professional services, where high skills were needed, but one could not look at services as the direct employment effect. Rather, one had to look at the indirect effect on manufacturing. A lot of the debate around foreign direct investment in Africa had said that weak infrastructure and service inputs were important to manufacturing. They accounted for probably as much as labour input, or maybe slightly less, and were crucial for success. So innovation in services might well provide a good platform for improved manufacturing performance.

On the possible policy interventions, Hodge said there might be a case for linking the broad array of instruments offered by the departments of trade and industry and science, culture and technology. For example, the Innovation Fund could have some export marketing systems attached to it. Policy also depended on how easy it was to identify the firms that deserved the funds.

The debate in South Africa about productivity was often laid at the door of labour, forgetting the role of management in bringing about productivity change and innovation.

Keryn House of DTI said that it had become increasingly important to look at the role of the market in policy-making. The global village required us to really know the market, which until now had not really been a big part of policy-making.

PRODUCTION AND TECHNOLOGY CHANGES, RESTRUCTURING AND EMPLOYMENT IN THE PLASTICS SECTOR

Chris Malikane and Simon Roberts, University of the Witwatersrand

In common with most industrial sectors in South Africa, the plastics industry had faced the pressures of restructuring that followed on the decision to liberalise the economy to encourage export-led growth. This had implications for production and technology as well as growth and employment.

The authors identified three theoretical perspectives on the relationships involved. These were the orthodox neo-classical, the structuralist-institutionalist and the Keynesian approaches.

The orthodox neo-classical approach asserted that free trade led to efficiency and employment growth. The structuralist-institutionalist approach emphasised institutional relationships that firms engaged in, which could influence their capacity to respond to pressures brought about by liberalisation and restructuring.

The Keynesian approach emphasised the role of effective demand in promoting employment, concentrating on the role of government in stimulating effective demand and therefore productivity and employment through learning-by-doing effects.

The authors said that, like elsewhere in the world, the plastics sector in South Africa was concentrated upstream in terms of ownership and of production. The dominant firm was Polifin, which was owned by Sasol. There were many downstream firms which produced products which were inputs into other production processes in manufacturing.

Under trade liberalisation, higher levels of trade had been accompanied by higher levels of production and lower levels of employment in South African manufacturing generally. The plastics sectors had performed better than most other sectors, with average annual real output of 1.2% from 1990 to 1997 and employment growth of 0.5%. Over the same period, imports increased by more than threefold and exports increased, from a much lower base, by a factor of 6.5 in nominal rand terms.

Although plastics manufacturing was relatively developed, there was a trade surplus in only two main product groupings, baths & basins and packaging products.

SURVEY AND CASE STUDIES

The authors sent questionnaires to over 200 firms, of which 88 responded giving a response rate of 45%. Case studies were undertaken into six firms while further interviews were conducted with industry organisation, DTI and polymer producers, including Polifin.

The aim was not to put forward a particular hypothesis, but to analyse what was actually happening in the sector based on the sample. The study combined both qualitative and quantitative data analysis.

Of the respondent firms, 71 had made a major investment or production change since 1990, of which 54 involved a change in production technique. Of the firms making major investments or production changes, domestic demand and pressure from competitors were by far the most important of the motivations identified, followed by export requirements which were an important stimulus for 37% of firms. Only 10% of firms recorded government measures as being an important stimulus, although a significant proportion of firms had drawn on government support programmes.

Perhaps surprisingly, there was no direct association between having made production changes and firm growth, while a significant association was, however, found between changes in production technique and contraction in employment. This might suggest the introduction of labour saving technologies, in which case there should be a strong association with a higher rate of increase in labour productivity. But there was no significant difference in the level of labour productivity or its rate of change for firms making changes in production techniques. Indeed, for the whole sample there was a strong and highly significant positive correlation between changes in employment and turnover.

There was also no association between changes in production technique and the capital:labour ratio, and firms which had made changes in production techniques had a significantly lower mean rate of increase in the capital:labour ratio.

Production technique changes were found not to be associated with growth. In fact, they were associated with employment contraction, but there was no relationship between the capital:labour ratio and employment contraction, or the change in production technique. So it was problematic to use the capital: labour ratio as a proxy for employment contraction and other factors had to be considered. The authors believed that there was a need to find associations of motivation with performance, and also to contextualise the changes that companies underwent. For example, companies could change production techniques because of effective demand problems.

In terms of institutional relationships, it was found that these played a role in terms of sources of technology. Companies that sourced technology internationally were not good export performers and used this technology to produce for the domestic market. The length of the relationship with suppliers played a crucial role in terms of companies being able to cope with pressure from competitors.

It was noted that price-based competition was associated with pressure from competitors and employment contraction, which prompted firms to adopt defensive strategies. These were strategies that led to employment and turnover contraction.

Quality-based competition was associated with domestic demand and expansion, which was related to product innovation and design. There was a very close association between having made a change of production technique and the firm's participation in international trade. But there was not an association between trade performance and performance in terms of turnover or employment. This suggested that openness correlated with pressures to restructure, but there was not a clear association between actual success in exporting and improving turnover.

However, there was an association between having drawn on foreign sources of technology and the performance of the firms. So, it could be argued that here might be a link between export performance, or participation in international trade, and the ability to source foreign technologies or foreign sources of technology. But that was actually not the case. There was no relationship between having sourced a foreign technology and participating in international trade. It seemed as if the ability to source the foreign technology was associated with a strong growth, but trade was not associated with a positive growth or employment performance. Obviously, several different things were going on here at the same time.

Firms were also asked about trade liberalisation in terms of a number of factors ranging from competition from imports through to product development, changing work practices and technologies. As might have been expected, there was a negative correlation between the overall impact of liberalisation and employment performance. Having made a change to production techniques was also significantly associated with high ratings of the impact of tariff liberalisation.

Of the firms experiencing a high impact in terms of competition from imports, there was a clear distinction between firms which had been able to respond in terms of product development and those which had not. Firms that said the impact of liberalisation was also high in terms of product development were four times as likely to have achieved high turnover growth as firms recording a high impact in terms of import competition, but not in terms of product development. Production capabilities in terms of product development rather than the introduction of new technologies per se appeared significant, although the relationship did not hold for firms recording liberalisation as having stimulated changes in technology. The ability to respond through product development was also not linked with export performance. These firms did not have a higher mean level of exports, nor were they significantly more likely to have increased exports. They did, however, have a significantly higher mean proportion of imported inputs.

CASE STUDIES

A series of case studies was conducted because the survey data had indicated that institutional relationships were important, as were the motivations for making the changes.

1. Manufacturer A of auto components - This firm had established itself as an original equipment manufacturer supplying all the major motor vehicle assemblers in South Africa. Its employment was stable and it had recorded strong growth in production based on its capabilities in a relatively specialised production technique (moulding using thermoforming). Competition was largely non-price due to meeting demanding standards and the ability to supply on a just-in-time basis.

2. Manufacturer B of auto components - This firm supplied three major assemblers and used the more standard injection moulding technology. It had engaged in significant restructuring and cut employment. Its technologies were supplied by the auto assemblers on licence. It competed with other sub-contractors on price subject to meeting supply conditions. Liberalisation had increased the competitive pressure from foreign suppliers.

3. Intermediate manufacturer of plastic sheets for baths and basins – This firm manufactured imported polymer into sheets for moulding into baths and basins by domestic firms. These firms supplied both domestic and international markets and was the most successful sub-sector in terms of exports. It had increased employment and recorded high rates of turnover growth. Its ability to adapt and use international technology together with local innovation was seen as the most important contributor to its development. While there had been increased import competition downstream, the cluster of manufacturers was internationally competitive based on quality, ability to deliver and price of the product. The knowledge and technology of the firm had been developed in-house, using understanding gained from international practices and from technology licences from the supplier. The firm had recently used its own skills to build a major new plant to expand capacity five-fold.

4. Manufacturer of tubes and pipes for building/construction -- this firm used relatively standard technology embodied in the machinery purchased, although there was scope for some in-house adaptation. There were also significant economies of scale associated with production. It had cut employment and recorded positive, but low, growth in turnover. Weak domestic demand had been the main reason for its poor performance and had prompted the firm to increase exports to maintain the scale of production. Competition was largely price-based.

5. Manufacturer of plastic folders/files (stationery) - This small firm used readily available technology embodied in machinery bought "off the shelf". It had cut employment and turnover growth had been negative. Competition in the domestic market was intense and largely price-based.

6. Manufacturer of plastic bags (packaging) - This was a major domestic manufacturer and part of a larger packaging group. While the main technologies were relatively standardised, there was considerable scope for product development and differentiation in quality and design. The firm successfully shifted production into higher value areas based on its own capabilities in response to greater import competition, and had embarked on a strong growth path, including exports. Competition took place through a mixture of price, quality and design. It had used duty free import permits to buy imported inputs and, as a large purchaser, viewed itself as having relatively strong bargaining power.

The case studies made it clear that it was important to view employment decisions as part of the evolution of firms. Employment and output moved together and labour and capital tended to be complements rather than substitutes. Where firms had experienced significant pressures, whether from domestic competition, weak domestic demand or liberalisation, some had reduced employment as part of wider cost-cutting strategies.

The case studies also highlighted the importance of understanding the interaction between liberalisation and the ability of firms to respond with product development. For example, the progressive shift by the packaging firm making plastic bags to differentiated and higher value products was partly a response to increased import competition. Of the two firms making auto components, the one that used the more specialised production technique had been better able to further advance product development and was also in a stronger position in competing with alternative international suppliers in the ongoing process of introducing new auto models.

Technology-based international interactions appeared to have greater value than trade-based ones. But while technology relationships were widespread, they had not undergone sudden change in either nature or scope. For example, the firm supplying the baths and basins sub-sector initially gained its production capability directly from an overseas company, via its South African owner, although now its own capabilities appeared to rival the original source in its particular niche. International technology arrangements also impacted on trade, although this was not embodied in formal agreements.

The case studies further indicated that capabilities determined trade performance, rather than vice versa. The export success of the baths and basins sub-sector was based on the prior development of production capabilities for the domestic market. The same was true for the packaging company. Rather than internationalisation and trade liberalization stimulating growth and development, capabilities developed in the domestic market had been the foundation for international competitiveness. There were also indications that exports took place in response to weak domestic demand, which might explain why the firms that had increased exports had not recorded better turnover performance. It was also evident that economies of scale meant that investment decisions could result in sizeable production capacities relative to the domestic market, and that exports were a way of maintaining volumes when domestic demand was poor.

It was, however, very important for the firm to be able to independently modify and adapt technologies and develop a degree of autonomy from the original source. Such change took place incrementally with processes such as adaptation, reverse-engineering and copying taking place, which were not necessarily identified by firms as being the introduction of new techniques of production. This had characterised the evolution of successful firms and contrasted sharply with the case of the second auto component manufacturer which relied of technologies supplied by the car assemblers, leaving it little autonomy.

Long-term relationships with suppliers did not in themselves contribute to growth. Firms might have relatively long relationships with suppliers because there were few alternatives in a highly concentrated market, as had been the case with almost all the case study firms. The benefits of vertical relationships therefore depended on the interaction between firms, and the position of downstream firms in balancing the influence of the dominant polymer suppliers.

Work practices, such as the ability to change production and do small batch manufacturing were cited in several cases as being production strengths, and more important than technologies per se.

The case studies pointed to the need to understand institutional conditions within the broader context of position and power in the supply chain. While factors such as size and relatively autonomy were important, there was also a link to the use of imported inputs. Firms that used a major input not manufactured in South Africa could import duty free and were not subject to the market power of the domestic polymer manufacturers. Import tariffs had historically been set on polymer products where there were domestic suppliers. Price-setting by domestic suppliers at import-parity levels had made manufacturers who depended on a single domestic supplier uncompetitive internationally. This was reflected in the data on the association between a higher proportion of imported inputs with high turnover growth.

Then authors said it was important to differentiate between what could be called "constructive" restructuring and "defensive" restructuring. Constructive restructuring was undertaken by firms that had developed their capabilities over time and largely supplied the domestic market, yielding employment and turnover growth as well as investment. They were adaptable and able to draw on foreign sources of technology. Supply chain relationships were relatively strong and mutually reinforcing as part of the development of products. The firms were relatively autonomous and able to reinforce their position vis-a-vis larger suppliers.

Firms opting for defensive restructuring usually experienced down-sizing and contraction. While this could be a platform for future growth, this would not automatically ensue unless a wide range of factors, including production techniques, were addressed.

CONCLUSION

The research findings provided no evidence in support of a link between export performance and growth while drawing on international sources of technology was not associated with export performance. Instead, it appeared as if restructuring had been associated with down-sizing and employment loss. Changes in production techniques were associated with cutbacks in employment and yet were not associated with higher rates of increase in labour productivity.

The general picture that emerged was that effective policy intervention needed to locate the domestic market as central to the firms' capabilities and their ability to generate jobs. The findings suggested that with the stimulation of domestic demand, firms developed capabilities and became more competitive internationally. This was accompanied by growth in turnover, which was positively associated with growth in employment. In addition, raising domestic demands would not only raise production and productivity levels, but would also go some way towards addressing institutional problems that blocked downstream firms from accessing technologies.

DISCUSSION

The discussant, Anthony Black of the University of Cape Town, said the plastics sector was very similar to the clothing sector discussed earlier. Both were characterised by the involvement of a lot of small firms, relative labour intensity and a dependence on pricing policies or access to raw materials.

The plastics sector was very weakly developed in South Africa, relative to more upstream processes, partly because of the huge support that was given to the companies like Sasol and the development of the upstream chemical chain. The pricing of raw materials had also played an important role. The paper drew a distinction between the high and the low road response to restructuring pressures. The high road saw firms move up the value chain, develop greater autonomies and a high degree of market power. They developed more technologically and then moved successfully into export markets. On the other hand, the firms who adopted defensive restructuring followed the low road of downsizing, price-cutting, outsourcing and so on. The paper argued that capabilities were important, and were essentially developed in the domestic market. These could then be used in the export market, which was really what underlay successful export performance. Demand was also important, not only as a means of generating growth, but also to generate new investment and a more rapid acquisition of technological capabilities.

All this was an implied critique of trade liberalisation, although the authors did say that firms that imported a high level of their inputs had greater autonomy, which strengthened them. He had not, however, found that the argument about exporting firms not having done well, and the implications of that, very convincing. There were a whole lot of issues involved and the aim of liberalisation was broader than export related growth.

For example, the authors had argued that there was no association between firms' growth and involvement in trade. That might be so, but there were a lot of reasons for that and the paper had pointed out that exporting was sometimes a defensive move by firms. They were under pressure, domestic prices were being lowered towards the international price level, and firms had to respond. One obvious potential response was to move into exports as a defensive approach. This was happening in a whole range of sectors. The automotive sector would be one where firms had literally been forced into the export market. This might mean that they had had to take on a foreign partner or sell their shares at quite low prices in order to gain access. So the outcome might be positive in the long term, but it started off as a kind of defensive restructuring approach, which, of course, was part of the objective of trade liberalisation.

Exporting also took time to develop and one would expect that firms were not suddenly going to start doing well once they started the very difficult transition into the export market. Exporting was also likely to result in greater specialisation, which would have short-term negative implications for employment. There were many studies in Latin America which showed that export success was really based on previous policies of import substitution and countries did not necessarily have to liberalise in order to get export growth.

But there were several problems with this argument. For example, the two automotive component case studies in this project were previously highly protected, developed substantial capability at small batches and became highly flexible. In fact, they did things with machinery which completely amazed visiting engineers. So this was a real breakthrough technologically. But, of course, the problem was: what was the purpose of that production capability? What was it actually used for? In a globalising scenario, it actually did not get them very far at all because they were not equipped for a large volume of production for more internationalised market.

THE HIGH ROAD OR THE LOW ROAD? INDUSTRY STRATEGY AND EMPLOYMENT

Based on
IS SOUTH AFRICA'S HIGH-PRODUCTIVITY GROWTH STRATEGY APPROPRIATE IN A LABOUR-SURPLUS ECONOMY? - *Nicoli Nattrass, University of Cape Town*
A FRAMEWORK FOR EMPLOYMENT POLICY IN SOUTH AFRICA: INDUSTRIAL POLICY AND EMPLOYMENT - *Miriam Altman, University of the Witwatersrand*

The debate on the best approach to industrial policy to increase growth and employment is a hardy old chestnut among economists that inevitably results in some heated exchanges around low or high wages and/or productivity, "sweatshops" and niche markets. These two papers predictably raised the temperature somewhat during the forum, but provided some interesting insights.

Nattrass said the core of the problem was the potential trade-off between short-term job creation and laying the basis for sustainable growth and higher future job creation. Was it better to maximise the number of jobs created now - in which case labour-intensive investment was preferable - or was there an argument in favour of capital- and skill-intensive investment as a catalyst for more dynamic and labour-demanding growth later?

In the well-documented case of the Asian Tigers, there was no tension between the objectives because the growth-path was labour demanding, although generally not labour-intensive. Initially, workers were drawn into labour-intensive sectors and activities, but as economic growth gathered pace, the production structure shifted steadily towards higher productivity activities. Labour productivity rose, but so did employment because of the even faster, export-driven increase in output.

There appeared to be little chance of South Africa replicating this growth path. It faced very different international conditions, and its growth strategy was not based on the notion that labour should first be drawn into low-wage, low-productivity activities, and then only be gradually drawn up the value-chain. Indeed, the very opposite notion appeared to be driving labour and industrial policies - that high value-added and high labour productivity, and hence high-wage, activities should be promoted now in order to transform South African manufacturing into a dynamic and competitive lead sector.

Nattrass argued that this approach was, at one level, absurd given South Africa's massive labour surplus and capital shortage. Instead, it should be moving towards high capital productivity coupled with low labour productivity. This suggestion had been met with horror by trade unionists and officials in the departments of labour and trade and industry, but it did not imply a move to a "sweatshop" culture.

They preferred the "high productivity now" (HPN) growth path that assumed that, even in a labour-surplus middle income economy like South Africa, it was necessary to increase productivity today in order to move the economy onto a more dynamic and labour-demanding growth path tomorrow. This approach assumed that competitiveness rested primarily (if not solely) on the adoption of cutting-edge technologies, on nurturing firms and segments of the economy that demonstrated competitive advantage, and otherwise generally encouraging structural change in favour of higher value-added activities.

Those favouring this approach argued that if a country started at the bottom end of the productivity chain, it would get trapped there and be caught in a vicious cycle, or a "race to the bottom." It would, for example, be unable to compete with China, so it would be better to go in strongly at the top.

This kind of argument first emerged in the Industrial Strategy Project (ISP) and Nattrass said its ghost still lurked in the corridors of government. It claimed that high productivity would drive the rising tide of growth, and the unemployed had to go to night school and training programmes whilst waiting for the employment waters to rise.

HPN came in hard and soft versions. The soft version propagated by the department of trade and industry (DTI) said that active support should be given to higher productivity firms and sectors, and that productivity improvements should be sought wherever possible. Such a strategy only harmed low-wage, low-productivity activities as resources were not channelled in their direction.

The hard HPN approach not only promoted high productivity through supportive measures but engineered an economy-wide shift in favour of higher productivity firms and sectors by actively undermining and even destroying low-wage, low-productivity sectors. Wage increases could, for example, be used to make these sectors uncompetitive and force them out of business.

While this model worked in countries such as Sweden, they had full employment and could fit workers back into jobs after re-training. South Africa did not have full employment, it did not have very good training programmes and it did not have any kind of support for the unemployed.

But hard HPN was being championed by the ISP and COSATU because it provided training for workers and boosted wages. Even the Ministry of Labour argued against making wage exemptions for small firms and the removal of compulsory extensions of collective bargain agreements to non-parties. It argued in favour of pushing a common wage floor across the economy, even though there were vastly different wage structures and different poverty situations in the country. It justified this by saying it did not want sweatshops but a social partnership with labour.

Nattrass said this view had been repeated at the forum by Alec Erwin, the trade and industry minister, but was plain politicking given the tensions between COSATU and the ANC in the Alliance. She did not want sweatshops either but she would prefer it if government simply said it did not want that kind of growth path, but rather one that covered high and low productivity, labour and capital intensive investment etc. But even then it still would not confront the fact that the labour laws were actually preventing that change and, until it openly supported labour market reforms alongside the broader process of adjustment, there would be no significant reduction in unemployment in the short or medium term. This meant grasping the nettle of trade union disapproval - and the ANC had yet to do that in any meaningful way.

Nattrass said that there was a distributional dilemma in HPN strategies in that they asked the currently unemployed generation to make a sacrifice for the sake of the employed and the better skilled amongst them, and for the next generation, which would supposedly enjoy the fruits of a more dynamic economy.

One way around this distributional problem would be to increase the taxation of employed workers and high income earners, and then use that extra tax to fund a social grant for the unemployed. The trouble was that most estimates showed that this could not be done very easily and even if it was done, the grant would be rather low.

Those favouring HPN strategies had to make an ethical judgement about the costs involved. Not only did they have to be sure that an HPN strategy would actually deliver more labour-demanding growth in the future, but they also had to be sure that the benefits to future generations were worth the costs borne by many in the present, notably in the form of unemployment.

Ultimately, the decision as to which strategy was the best depended on the prevailing social ethics and on the level of development. For a middle-income economy like South Africa with high unemployment and limited fiscal resources for providing adequate welfare, opting for a hard HPN strategy was fraught with danger. Such a path would exclude too many relatively poor people from sharing in the fruits of growth. Wage inequality might fall, but overall inequality could rise if unemployment increased significantly. And, as international evidence on growth suggested, rising inequality had costs in terms of growth itself.

ALTMAN STRIKES BACK

Altman stated upfront that she could not agree with Nattrass's thesis for a number of reasons, not least being the assertion that high productivity and low productivity industries could coexist.

She also did not believe that HPN had been DTI's strategy over the past six years. Instead, there had been a continuation of a resource-based strategy, which was an area in which major investments had taken place. These had involved minerals and metal beneficiation, a degree of privatisation and state-led investments related to procurement offsets. There had been no major high productivity investments, with the possible exception of the motor industry.

Secondly, the problem had not so much been the interface between macro economic policy and between macroeconomic policy and labour policy, but rather supply side constraints that were related to a poor articulation between contingent markets. South Africa did not have a well-developed labour market, which in fact rotated around a very small core.

It was also not just a question of flexible prices, but rather the fact that training and other institutions did not function very well while financial markets were also not appropriately developed for this economy. At the same time, the department of labour did not only have a regulatory function but was also actively working to improve the labour market through labour centres, skills programmes and the like.

It also had to be realised that, with about 5.5 million unemployed people, the scale of the problem was so large that it would be difficult tackle the problem quickly. There was a whole contingent of people who were totally marginalised and should be covered by some kind of social welfare grant, as was being considered at the moment. The problem was also multi-tiered. There were, for example, matriculants who also did not have jobs, but who could easily be trained and brought into the workforce.

South Africa was also a middle income country, and, as such, very different from what Taiwan, Thailand or Indonesia had been 30 years ago. They had been low income countries that had moved up a value chain as labour markets became tighter. They had also been low cost countries. South Africa was a middle income country and the difference between it and those countries was that its labour force and human development index did not match that of a middle income country. It had a high cost structure and a labour force that did not go with it. So to follow a similar strategy, and attempt to move up the value chain over a period of 20 years, would not work.

Government had been running a dual strategy that looked at creating value-added industries while running a range of social welfare programmes on the side, giving what could be seen as high road and low road scenarios, which were not necessarily completely separate things.

What was needed was some kind of propulsion at the core that drove incomes. Because this was a middle income country, it had to cover the cost of living to raise the human development index in some form or another. Whether those transfers were intra-household, or fiscal transfers, there had to be some kind of propulsive core. And that was the high productivity core.

There was a very clear relationship between export diversity and export composition and GDP. So a country could either sit at the bottom, or it could start moving up with the help of a high productivity industry. It did not have to be cutting edge, but it should not be assembly either. So, the idea was to have a high productivity core that led incomes through the economy. That would generate the investment, the employment multipliers and so on.

At the same time, the country should start crowding in other kinds of activities such as technological systems and investments that generated demand that required lots of parts. It should crowd in local producers and encourage local technology to be direct and indirect suppliers to high productivity projects. This would promote low productivity industries at the same time.

The DTI sometimes called these sidestream multipliers. They included hairdressers, shoe repairers and sandwich makers and were crowded in because more people had money for these services. This was probably what underpinned the American economy, although this was debatable. It was not labour deregulation, but a very high productivity, high growth IT industrial base which needed lots of low productivity jobs.

At the same time, and at the lower end of the spectrum, there would be a need for a basic community service, which was not a special employment programme or developmental welfare. This was due to the problem of social cohesion in this country because of the large numbers of people that were totally marginalised and needed services around HIV/Aids, nutrition, youth groups and other ongoing services. These could hire people for 10 to 15 years, whether they were public or private or public/private partnerships.

This would get people involved now and almost "un-marginalise" people. One of the first approaches to this kind of problem had been public infrastructure-led programmes, but this had never been regarded as a core strategy as it had only limited effects and involved low wages. Strategies had to be developed to keep wages low. That could be done through devaluation, or wage controls, or maybe reductions in the price of wage goods, or a generous social wage. But these were difficult to maintain, particularly in a middle income country.

It was also not a very propulsive strategy. When the focus was on low wages in a middle income country with high dependency ratios, a lot of people in any one household depended on one wage earner. This assumed that there was very high wage elasticity, meaning lower wages and higher employment. Firms would be attracted to invest in South Africa because wages were lower. Recent research had shown that there was a negative wage elasticity, but it was not that high. As a result, if wages were to be reduced, the compensation in the rise in employment would not be sufficiently high to overcome the welfare loss. This implied a net welfare loss. But the objective in raising employment was to raise welfare, not just to create jobs, although that was a good thing.

Another problem was that if a country relied on low skill, low productivity industries such as assembly or low level clothing, it created an image for itself in the international market for those kinds of goods. These could range from wigs to ashtrays of the cheap kind that were once produced in the 1960s by Japan, China or Hong Kong. These countries had spent a fair amount of time changing their image, but South Africa, as a middle income country, should not want to start there and perhaps get bogged down there.

A third broad strategy that had been adopted by the DTI had been the beneficiation strategy, especially for minerals and metals. This had involved very large projects costing R1 billion or more. Mozal was a good example. This reflected the fact that most investors were attracted to South Africa because of its resource base in the absence of any major market growth potential, which was usually the main reason for most foreign direct investment internationally. These minerals and metals projects attracted world scale types of investments, resulted in falling input prices and helped to spur on the establishment of a whole range of other, associated higher value industries.

The problems with this kind of strategy included the fact that it could result in exchange rate over-valuation, which could crowd out other labour intensive kinds of activities. In addition, the lead times were incredibly long. It could take years for the knock-on effects on employment and the establishment of other industries to be felt, which created a great deal of frustration.

This raised the question of whether a country should therefore not start up further up the value chain instead and import inputs at world prices, whether they were local or foreign. This would affect foreign exchange earnings, but would also mean that the country would not have to wait for 20 years before it started to see multiplier effects.

Multipliers also worked backwards, of course. If an industry was expanded, input industries could be encouraged to re-locate to be nearby. So if a country wanted to work towards higher skills, it needed to trade up and raise skill levels. Through segmenting the labour force, it would find that there were groups of people who could feed in if there were quicker systems of generating skills.

Various types of original equipment manufacturers in electronics or in motors could be joint ventures that enabled technology transfer while attention could be paid to fast-tracking local technological systems. There was a lot of innovation in the economy that did not get past the trade mark office because it was not funded, did not go to scale and was not marketed. A lot could be done to support and fast-track these projects.

So what were the policy implications? A high productivity strategy could sound naive and unrealistic given the skills shortage and the administrative capacity within government. All this might make one feel a little bit sceptical and might make it seem easier to follow a low skill strategy, but this showed that not enough thought was being given institutions and power relations within markets.

Most of the major investments that had come into the country had been related to resource-based investments and government-driven investment in some form or another. So attention could be paid widening the allowable industrial participation offset investments, high value agriculture, information and communication technologies, infrastructure development, the establishment of training institutes and allowing foreign companies to set up technology hubs. In these ways, government procurement could be used to push a high productivity strategy.

Secondly, greater use could be made of telecommunications licenses to grow skills and jobs. Vodacom, for example, had the most successful strategy in the country of setting up small telephone centres as small businesses.

Thirdly, government's procurement of financial services could be used to leverage in more developmental behaviour and creative risk appraisal by financial institutions. Solutions need not always be market-based. Government could use the levers available to it to force more developmental behaviour and more inclusiveness in the way that markets functioned.

The DTI should, for example, focus more carefully on some very serious supply-side constraints such transport costs, wharfage and the flow through the ports.

In the Labour Market Commission, it had been suggested that there be an "Incomes Policy", but this would only be appropriate if fiscal monetary policy instruments had been exhausted in the fight against inflation. This was a very serious choice that was not necessary in South Africa right now.

NOT SO FAR APART, REALLY

The discussant, Rob Davies of the University of Zimbabwe, said that the nub of Nattrass' argument was that a low wage path was unpalatable to government and organised labour, who favoured the hard, high productivity now strategy. This implied creating and protecting a labour aristocracy as there would be a generation or two of people who would lose out initially.

This was of concern to him, given the Zimbabwean experience. There, delays in implementing land reform because of fears of what this could do to agricultural output had resulted in not enough attention being paid to an excluded and disadvantaged group. The resulting turmoil over land, and its effect on the economy, 20 years after independence, meant that the country was now reaping what it had sown.

There were some aspects of the HPN strategy that he could accept. For example, the notion of raising wages to try and force firms and managers to pay more attention to productivity appeared to be a reasonable strategy. A study of the Zimbabwean cut flower industry, which had until recently been of the growth industries, had shown up some interesting points. He had assumed that this was a low wage industry as agriculture was based on low wages in Zimbabwe.

But he found that a growing trend in the West of insisting on "green labelling" as a non-tariff barrier to prevent third world countries from using chemicals, had been expanded to also insist on high labour standards. As a result, farmers were paying much more attention to productivity by switching from contract labour to permanent labour, providing good housing, providing crèches for their workers and so on. The only way they could remain profitable was by training, investing, by keeping a permanent work force and the like. As a result, the green labelling had forced some Zimbabwean commercial farmers to move from feudalism into capitalism. So COSATU's view on not pushing wages down and promoting productivity had merit, but there was also room for the low productivity approach in some cases, implying that one had to take a bi-polar view. There was a continuum out there in the market of firms going from low productivity up to high productivity, and to Iook at only hard HPN was a very simplistic view of the actual structure of the economy when a much more nuanced view was needed.

Inter-firm linkages in productivity growth were extremely important and one also had to look at the role of small firms in productivity growth. He was not sure that there really was a conflict between what Altman was saying and what Nattrass would like to see. Nattrass was in a sense echoing the Maoist phrases of "let a thousand flowers bloom" or "we've got to walk on two legs" in arguing against the hard HPN strategy of saying certain firms had to be closed down. Instead, there should be a strategy saying that while some firms would be tolerated, efforts would be focussed on other things.

Altman, in a much more diverse way, was making a similar argument that a lot of different strategies or interventions in different sectors were needed.

However, the HPN strategy was in a way unsustainable because of the ultimate distributional struggles that it gave rise to. There was a similar problem inherent in low productivity-based industries. Altman had highlighted the fact that South Africa - and many African countries - tended to be high wage cost countries compared to Asian countries. If they had high wage costs and low productivity, the way forward would depend on sustained exports, which required real depreciation, forcing down real wages and that, in itself, could create distributional struggles.

In Zimbabwe, the distributional impact of this had been enormous over the past ten years, leaving some people who were extremely well off and a lot of people who one simply did not know how they managed to survive. Both sides of the story were extremely complex, but it was clear that one had to think about the social dimensions of the strategies and not simply the economic ones.

DISCUSSION

In discussion, some delegates said they had problems with bracketing off the issue of wages and productivity to focus on low income sectors. While there had been wage increases since 1994, a living wage was still not paid in many sectors. Those wage increases that had taken place had to be defended and applauded, and workers should not be asked to reduce their wages again because of problems in a particular industry.

In addition, most of the wage increases had actually gone to middle and upper management, and not to low income workers. In terms of productivity, one had to look at the causes of the problem. This was largely a management prerogative, and it was important to look again at the history of management in the country and some of the problems this had resulted in.

Some factories had closed because of the rapid reduction of tariff barriers and the consequent legal and illegal imports flooding the country, but management decisions had also played a role. In clothing, for example, there had been a lack of investment in machinery, in technology, a lack of training, and a lack of innovation, all of which had meant that the factories had not been able to compete. To say that the workers should bear the brunt of these problems was unfair and short-sighted and drew the boundaries far too closely in terms of issues of wages and productivity around the low paid workers in the sector rather than really investigating some of the historical problems and possible solutions.

Another view was that Nattrass was right in saying that South Africa had to pursue a strategy of "walking on two legs" to support high productivity activities and moving up the value chain, while also allowing labour intensive activities. In this, it was increasingly evident that certain aspects of labour regulation did hinder investment and constrained growth.

Her criticism of the ISP's work was a bit misguided as it really emphasized training and advocated moving up the value chain by, for example, going into niche designer clothing rather than trying to compete with plain T-shirts from low wage countries. This was not necessarily a more capital intensive approach and could still be labour intensive while providing training that would allow South Africa to compete better.

It had to be remembered that a lack of skills in many situations had actually led to higher levels of automation in South African firms. But the old policy of supporting beneficiation in the form of big very capital intensive metal products, metal processing plants, through tax benefits, dedicated infrastructure and the like was problematic. This was especially so when firms had to buy aluminium at the London Metal Exchange price plus transport costs, leaving one with very capital intensive plants with no benefit to downstream users.

Delegates heard anecdotes about employers who had invested heavily in both plant and machinery to get their plants to run optimally, but were now considering pulling out of South Africa. These were not large corporations , but small to medium sized businesses which cited government regulations, mainly in the labour market, as being their main source of frustration.

One such business had told the tale of an expensive piece of machinery being wrecked by an employee, but the employer could not fire him. At the same time, under the Employment Equity Act, the employer had to come up with a plan that would give him very little flexibility in how he was going to be able to allocate his work force etc. He said he was quite willing to move into the Black labour market, but he had to have flexibility to be able to do it on his own terms. Not being able to do this was affecting his inability to function and operate, much less expand.

There was enormous potential for higher value-added industries to upgrade the labour force because they needed skilled and reliable people. A study on the garment and textile industry had found that although it had been badly affected by a flood of imports, there were some firms that did quite well. They could respond and move into higher quality niche markets very successfully. This had to be multiplied many thousands of times and the only way that would happen would be if there was an economic environment which was conducive, which supported this and in which government was not too much involved in terms of regulation.

The concern was raised that the delegates were really "talking right past one another." The question had to be asked: "High productivity among whom?" It was one thing to improve productivity in, for example, the automobile industry by replacing assembly line workers who tightened bolts with wrenches with robots, leaving one person sitting at a computer screen to operate the robots. Value added per worker in that industry would very certainly rise and this could be repeated that over and over again.

But other sectors of the economy would be left out of this, especially the informal sector, which would mostly be peopled by former auto workers. How did productivity apply to them and other unemployed or under-employed people? Or would high productivity growth and therefore high wages exist only for some select people and not others? Or was the strategy to try to create at least some wages and some income for all the unemployed?

It was suggested that it might be better to avoid the expression: "high productivity growth", as it usually meant "high labour productivity", but, as Nattrass had pointed out, in a labour surplus economy there was no reason whatsoever to maximise labour productivity. It was not possible to maximise output and jobs by maximising labour productivity, which actually minimised it.

What should be examined instead was the constraints facing different kinds of productivity.

Wages were not the main determinant of the level of employment in an economy, although they could reduce emploment if they were high enough. What was important was the relative price of machines and labour, or how much people had to pay when they employed a machine as opposed to when they employed a worker. In almost every economy, the price paid by an employer for a machine or a worker was not the same as the income received by the supplier of that labour service or by the supplier of that machine. Taxes and subsidies in the form of special interest rates and tax breaks intervened to lower the price of machines. And usually the exact opposite was done for labour in that what the worker got was typically less than what the employer had to pay to employ that person because of employment taxes, payroll taxes and so on. This was an absurd strategy in a labour surplus economy, which should be subsidising the employment of labour – and if that had to be paid for in taxes, governments should tax the use of machines!

This would maintain the wage received by the worker, reduce the cost of employing labour and increase the cost of buying the machine. If the tax was revenue neutral, the average profit rate in the economy would not be affected by this proposal, rather the profit rate in clothing would be increased and the profit rate in beverages would be decreased because clothing employed about 100 or more per unit of capital than the beverage sector.

It was pointed out that what had been overlooked in the discussion had been the role of the market, and the fact that it was increasingly dominated by rules of origin. These required a certain amount of local processing, which would trigger activity and supply pipelines in a way not seen before. It would therefore be premature to "trash" beneficiation strategies just yet. It was recognised that DTI strategies to date had been rather a mélange of resource based policies and supply side measures, which were not sector specific. They had therefore lacked definition, but this reflected the diversity of the situation in South Africa. On the one hand, there were companies such as high tech Dimension Data, which was listed in London, and on the other, there were low tech and low level clothing manufacturers in Botshabelo.

But there was no evidence to suggest that significantly reducing wages would make a substantial impact on employment, while there was no indication that investment levels were substantially determined or restricted by high levels of wages. This was not what investors or non-investors were complaining about. They were worried much more about issues of hassle, of regulations covering hiring and firing etc.

They were also more concerned about access to markets through, for example, the African Growth and Opportunity Act, which would open up access to the US market for many firms. They were also looking for various other forms of support, such as training for pattern makers, advice and training on automated cutting and marker making. The fact that South Africa already had some good labour and environmental standards would make access to the US market easier. All these highlighted the fact that it was wrong to consider the clothing sector only as a low productivity industry as it was widely differentiated. Those that were truly at the lower end might, however, need to have lower wages and that was an issue that had to be grasped, difficult as it was.

The focus should also not be solely on the manufacturing sector as the rapid growth of the services sector provided new challenges in hitherto unexplored areas. These included private education and health and they would need different forms of policy intervention. Key issues here would probably not be wages, but regulation, public/private partnerships and the provision of good technological infrastructure.

Asked to sum up the debate, Nattrass picked up the issue of wages. She said there was no logical reason why a high wage/productivity firm in, for example, clothing, would at all be threatened by a low wage/productivity firm. It was "absolute nonsense" to suggest that the latter could undermine the former.

She had never suggested that wages should fall or that there should be a labour intensive/low wage sector. What she was suggesting was to "let the bottom grow rather than chopping it up, and chopping it off, and burying it, which is what's happening now."

The average wage in the industry would be affected because more jobs would be created at the lower wage, but the wages of existing workers would not be affected. But where jobs were being lost because of tariff cuts and other structural adjustments, there was no social safety net or welfare let alone new jobs.

She was also concerned about suggestions that, despite increased the competition facing most firms, government should force firms to raise their wages. While higher wages could lead to higher labour productivity, the South African experience had been that labour productivity was rising because employment was falling.

Altman said she had probably misunderstood Nattrass' paper and its call for a mix of high and low wage/productivity activities. This was a possible solution, but what she had been examining had been core strategies to drive the whole industrialisation process. A low productivity strategy would not drive the economy although that was probably where a lot of jobs were created. The focus should be on skilling, technology systems and innovation.

On labour regulation and the issue of wages, she said the issue of wages had gained notoriety in the early 1990s, when employers realised that their employees could now command much higher salaries. They were now largely inured to the issue of wages, saying it was not the most important element - indeed wages were now comparable to those in many other middle income countries - and were concentrating on the regulations instead.

Part of the problem was that the labour market was distorted, with too many unskilled people and not enough skilled people. Clearly, training institutions should respond better to labour market needs while the financial markets could respond better to small business to create jobs.

THE MACRO IMPLICATIONS OF HIV/AIDS IN SOUTH AFRICA: A PRELIMINARY ASSESSMENT

Channing Arndt, Department of Agricultural Economics, Purdue University
And Jeffrey D. Lewis, World Bank

THE SCALE OF THE PROBLEM

There can be little doubt that South Africa stands on the brink of a full-blown AIDS crisis. Arndt and Lewis said recent research estimated that, since the onset of the epidemic, more than 500 000 South Africans had died of AIDS-related causes. By 2015, this number was projected to grow twenty-fold to more than 10 million deaths. By 2008, overall life expectancy in South Africa was forecast to fall from its pre-epidemic high of 65 years to only 40 years.

While modification of high-risk behaviours could reduce AIDS-related death rates, the long delays between infection and death meant that behaviour change now would only begin to reduce the number of AIDS deaths in five years, with the full effect lagging by a decade or more.

With an HIV infection rate currently estimated at almost 20 percent of the adult population (and projected to increase), prospects of avoiding a major human development crisis over the next decade and beyond were dim. The epidemic had moved beyond its earlier status as a health issue to
become a development issue with social, political and economic dimensions.

WHAT IT COULD DO TO THE ECONOMY

The authors said that until about a year ago, very little research had been done on the macro-economic impact of AIDS on South Africa or on any other sub-Saharan African economies despite the fact that the AIDS crisis was now two decades old and the evidence, anecdotal or micro, of the rather devastating impact on the ground had been growing for some time. Most of the research so far had been done by ING Barings although there had been reports that a number of other South African groups, such as the Bureau for Economic Research, had begun to do work as well.

They had therefore attempted to fill in some of the missing gaps by developing a framework which would put together some of the disparate pieces of information available and provide an understanding of how different pieces of the puzzle interacted and what the medium-term prospects were.

In the context of the labour-related themes of the forum, the starting point should be the fact that it had been estimated that by 2010 the population of South Africa would be 12% lower than it would have been in the absence of AIDS. This was going to have a significant impact on the labour force while in the unskilled category, the decline would be 18%. One of the myths often heard was that the effect would be largely on the unskilled and therefore its impact might be rather muted because of relatively high unemployment. If one took the view that South Africa was a skills constrained country and that one of the impediments to faster growth was a shortage of available skilled people, then it was true that the impact of AIDS would be much less by 2010, an 8% decline was obviously much less than an 18% decline, but it was nonetheless a significant decline.

There were several key features of the AIDS epidemic that were likely to have substantial economic implications:
AIDS tended to strike young adults. Most AIDS-related deaths were likely to occur in the 25 to 45 age bracket. This would not only reduce life expectancy and the rate of population growth, but it would also increase the burden on the working age population, who would be required to care for the young and sick.

AIDS was very slow moving. The median span between infection and death was between eight and 10 years. During most of this time, the HIV positive individual might experience relatively few direct symptoms and employment and productivity might be only marginally affected. During the last two years, HIV positive individuals were likely to have declining labour productivity, and to incur increasing and substantial medical costs.
Infection rates differed by skill class. Semi-skilled and unskilled workers exhibited a peak infection rate nearly three times the rate for highly skilled workers. This would affect the demand for both labour and capital and relative factor returns.

All these would affect factor returns, employment, income distribution, savings rates and other economic variables. The impact would be felt through a number of different channels - through pressures on public spending, from the effect on productivity/training, from shifts towards current spending away from human and physical capital investment, from firms taking action to reduce dependence on labour and control AIDS-related costs, and the like.

CGE MODEL ASSESSESMENT OF THE IMPACT OF AIDS

An economy-wide computable general equilibrium (CGE) model of South Africa was used to examine "cross-cutting" issues.

This model belonged to a class of models that in recent years had been applied to issues of trade strategy, income distribution and structural change in developing countries. A variety of substitution mechanisms were specified in these models, with substitution among labour types, between capital and labour, between imports and domestic goods, and between exports and domestic sales all occurring in response to variations in relative prices. Institutional rigidities and imperfect markets could be captured by the exogenous imposition of features such as immobile sectoral capital stocks, labour market segmentation and a fixed exchange rate, which together limited a neoclassical interrelation of the models but permitted their more realistic application to developing countries.

The model tapped into the growing body of research in South Africa into AIDS and used a hypothetical "no-AIDS" scenario and a more likely "AIDS" scenario between 1998 and 2010. The full methodology is to be found in the paper on the TIPS website.

PRELIMINARY MODEL RESULTS

The "no-AIDS" scenario postulated relatively low average growth rates of about 2.5% between 1997 and 1999, which accelerated slowly and steadily throughout the simulation period.

The "AIDS" scenario offered a very different picture. Growth rates started off at roughly the same level as in the "no-AIDS" scenario due to the relatively low incidence of AIDS. But as the impact of the epidemic became more pronounced and affected economic performance at various levels, GDP growth rates fell from year to year to about 1% until 2008, after which they rebounded slightly in 2009 and 2010.

These different growth rates had substantially different effects on the overall size of the economy. In the "AIDS" scenario, real GDP was about 17% lower than in the "no-AIDS" scenario by 2010. Substantially increased spending on health in order to combat AIDS might not represent an "improvement" in welfare relative to the "no-AIDS" base, and an alternative indicator might be non-AIDS related expenditure on food and medical services.

With fewer factors of production, reduced investment and lower productivity in the AIDS scenario, the size of the economy was bound to be smaller. But the population would also be lower and per capita GDP might actually rise. In Botswana, the effect had already been found to be negligible. In South Africa, in contrast, per capita GDP was expected to be substantially lower. So the survivors of the epidemic would be left with a smaller economic "pie" and more of this pie would be directed towards health and food expenditure with the result that discretionary expenditures declined dramatically.

Given high unemployment amongst skilled workers, and the fact that this category of workers had the highest HIV infection rate, casual analysis might predict a decline in the unemployment rate. However, the model found otherwise. The unemployment rate for unskilled labour actually increased, although only marginally. While the unskilled labour pool was smaller, slower growth meant that the demand for labour was correspondingly lower and the unemployment rate remained essentially unchanged.

When it came to government deficit financing, the AIDS scenario saw government's AIDS-related spending from the savings pool causing total savings to fall from 17% of GDP in 1997 to 14.2% in 2010. This "crowded out" private investment, which reduced capita formation and the rate of growth.

Overall, the impact of the epidemic could be quite substantial, but much more research was needed to get a complete picture, notably into the effect of lower spending on education because of higher AIDS spending, in skills accumulation and labour force growth rates.

Key policy issues such as financing for AIDS-related government expenditure would be very important. While the human crisis appeared to be practically unavoidable, appropriate economic policy measures would be able to significantly palliate the negative economic effects of the epidemic.

In the policy-making process, the slow-moving nature of the epidemic needed to be borne firmly in mind. The AIDS crisis did not call for snap policy decisions as in the recent Asian financial crisis. Instead, deliberate speed, careful planning and competent execution by government and other actors could substantially ameliorate the economic aspects of the AIDS crisis.

DISCUSSION

The discussant, Neal Cohen of USAID, said that if, as presently estimated, 24% of miners were HIV positive, they would probably be dead in 10 years, with enormous consequences for the mining sector. In agriculture, the figure was believed to be 17%, which would also have an impact. South Africa liked to view itself as possibly becoming the financial capital of Africa. At present, the HIV/AIDS rate in finance and insurance was 9%. If they all died in 10 years, there would definitely be an impact. In short, then, HIV/AIDS would have some impact on this economy. In fact, it would probably go beyond being just a minor impact.

One of the problems with doing a macro-economic model is that one did a macro-economic model where the basic work had not been done yet. The authors therefore had to create a model from scratch, basing it on thin air, as it were. They had based it on the demographic impact, which was about all the information that was available. In the process, they had made an enormous number of assumptions and to fault them on their assumptions was impolite because the fault was not theirs, the fault was that of the research community. The fault was that "we haven't done diddly, we haven't done anything really to analyse the economic impact of AIDS," Cohen said.

The authors had been surprisingly generous in their statements about recent studies that had been undertaken, but when one spoke about company level studies, there was only one of substance - but an analysis of the situation could not be based in this study alone. The other studies were, to put it mildly, fatally flawed.

Dealing with some of the assumptions made, Cohen questioned why it had been assumed that there would be a 2% real wage increase per year. The fact that between 1971 and 2000, wages had grown by approximately 2% real per year was all very well, but he would have preferred it if they had got more exact figures covering a shorter period. He was also not happy with the assumption that the only increase in government spending would be on the health budget. If HIV/AIDS grew at the rate expected, it would increase the welfare budget enormously while high unemployment in itself would increase spending on safety and security.

The basic problem was a lack of data on what the real impact could be on different parts of the economy. For example, subsidised housing for low income families would be irrelevant when many households had no breadwinner and the nuclear type family was no more because the parents were dead. The government had to start considering the implications of this.

The authors also assumed that the increased government spending on the health budget would be financed by borrowing, which would crowd out the private sector, cramping growth prospects. But if they had assumed that the government would sell off some of its assets through privatisation/restructuring, leaving the additional money to be used for AIDS, there would instead be an increase in investment and maybe a completely different scenario. A lot more research was needed to clearly spell out the pros and cons of all the options on a whole series of issues ranging from government borrowing to the effect of AIDS on total factor productivity.

The model used went further than anything that had gone before, but it was now important to go further because if researchers were going to be working with government to try to convince it of the need for policy changes, they needed more data. The October Household Survey, for example, could provide more detail on how families coped with AIDS. One of the first things that were expected was that as soon as family incomes began to drop, girls would be taken out of school.

Cohen was ambivalent about suggestions from the floor that aid agencies should be doing more to fund research into AIDS to ensure access to better data. Because the impact would be on South Africa as a whole, the government should want the country's own economists, who knew local conditions best, to do the research. As an economist involved in trade and labour issues, he was personally interested in the research and had funded a research on the issue.

INDIVIDUAL, HOUSEHOLD AND REGIONAL DETERMINANTS OF LABOUR FORCE ATTACHMENTS IN SOUTH AFRICA

Taryn Dinkelman and Farah Pirouz, University of the Witwatersrand

According to the 1999 October Household Survey, South Africa's unemployment ranged between the strict measurement of 23.3% and the broader measurement of 36.2% per cent. Much of the discussion on the reasons for these high rates, especially among the youth, focused on rigidities in the demand side of the labour market, how to fix these rigidities, or how to stimulate growth in order to create jobs.

The authors said their perspective was that looking at the supply side was just as important for labour market policy makers. They examined three different states of joblessness - the searching unemployed, who could be characterised as being active labour force participants; the non-searching unemployed; and the non-labour force participants. They had examined the barriers which were affecting the choices of jobless individuals to be in any one of these three particular states.

Search unemployment was often described as unemployment resulting from the rational rejection of available wage offers by unemployed workers in favour of further search for more lucrative offers. This definition was not of much use in the South African context, because with its 36.2% broad unemployment rate, it did not have a situation in which the majority of the unemployed chose to be unemployed because they were not happy with the wage offers received. This definition also did not explicitly recognize involuntary unemployment, and characterised discouraged workers as out of the labour force. What search theory could do, however, was alert us to the idea of search costs and the probability of being successful in search efforts. If one looked at these two factors a little bit more closely, search theory did become very relevant when looking at unemployment in South Africa.

Search costs included the costs of, or barriers set up by, language, lack of communication infrastructure, lack of transport infrastructure, and remoteness, all of which imposed costs on an individual's search activity. And the probability of success might be influenced by an unemployed individual's age, education, and whether they had contacts inside the labour force or not.

Both search costs and the variables which influenced the probability of being successful in search activity, were in effect conditioned by what was happening in the labour market. A useful framework for examining the different states of labour market participation was in terms of the flows between the different states of unemployment. Of particular interest to the authors had been those people who were drop-outs and had chosen to remove themselves from the labour force entirely; motivated individuals who moved from non-searching to searching unemployment and therefore became active in the labour force; disheartened workers who were theoretically distinguished from discouraged workers in that the latter chose to stop searching after a period of time of unsuccessful searching while the former had never moved out of passive unemployment because of the perceptions that search activities would fail and had never been encouraged to search. Discouragement was less likely to be the result of personal experience than of community experience.

Instead of talking about movements between the three stages of joblessness, it was possible to think of these states and the intermediate phases between them as a continuum of labour force attachments. Searchers would have the strongest attachment, non-searchers would be more marginally attached and non-participants would have little or no attachment. This could be extended to the employment state, in which full-time formal employees had the strongest attachment to the labour market while, the informally employed would have a weaker link. A further extension could be to include those who were studying or training, who would have a stronger link to the labour market through their educational institutions, than others who were not studying or training.

Official statistics did not, however, cover passive search options such as using a social network. This might be relevant, given that South African employers seemed to gather information on prospective employees in informal ways. With massive unemployment, this insider referral process was rational for firms to undertake

A PROFILE OF UNEMPLOYMENT

Unemployment was a diverse experience in South Africa. It had a gendered, racial, spatial and age-related bias. Broadly speaking, the gap between the broad and narrow unemployment rates was substantial at 14.8%. The gap widened when the analysis was done for former rural homelands (24.65%) and in the four poorest provinces: North West (19.5%), Northern Province (19.6%), KwaZulu-Natal (19.7%) and Eastern Cape (22.6%).

In the former homelands, almost 6 out of every 10 people were broadly unemployed with almost 4 of the unemployed not searching. The situation did not improve markedly in urban areas where labour force participation rates were higher at about 65%, but non-searchers were still 41.7% of the unemployed. On average across the country, more than 1 in 2 unemployed people were not searching actively.

Low labour forced participation and high passive unemployment suggested that there was widespread discouragement among the working age population in rural areas especially, causing individuals to drop out of the labour force, or remain only marginally attached. The lack of active participation was of concern in itself, but the fact that the picture of the spatial distribution of non-searching unemployment had remained largely unaltered since 1993/94, suggested that despite the removal of legal impediments to individual mobility, rural areas remained pools of unused labour and labour markets appeared non-existent.

Racially, unemployment was more likely to be a problem for Africans in the working age population. The narrow/broad unemployment rate gap was again large at 17.6%, suggesting that Africans had the largest pool of passively unemployed people. This was confirmed when one considered that non-searchers were about one quarter of the entire African labour force.

Unemployment rates for women were higher than for men despite a lower labour force participation rate, possibly due to domestic and/or agricultural responsibilities. About 45% of all participating women were broadly unemployed (compared to 30% of all men) and, of these, over half were not searching for work, but would take a job if offered.

Both broad and narrow unemployment declined over age cohorts, with the largest being in the 16-25 age group. It had been suggested that as the working aged population grew older, more individuals left the labour force through retirement, or became so discouraged by search failure that they dropped out completely. Unemployment rates declined with age because the demotivated unemployed (particularly women) classified themselves as out of the labour force, but also because more individuals were absorbed into employment once leaving the youth category.

For the youth, presumably straight out of school in the age group 16 top 25 years, the unemployment rates were frighteningly high. For young women, unemployment between the 16-20 and 21-25 year ranges fell more slowly than for men. Either women were hired more slowly than men, or men chose to opt out of the labour force before women did. Non-searchers as a percentage of the total unemployed fell over the ages 16 to 30 for women and over the ages 16-25 for men, and then started to rise for all remaining age groups.

The authors said non-searchers were distinctly different from non-labour force participants. They were much more similar to searchers than people who were out of the labour force. In terms of individual and household characteristics, the coefficients for the individual characteristics and the household characteristics on searchers and non-searchers were very similar. This suggested that in terms of those features, it was difficult to distinguish between the active and passively unemployed.

However, on the location factors or variables, it was possible to distinguish the non-searchers from the searchers. So it very much suggested a location type of story that these non-searchers were trapped in rural, ex-homelands and self-governing territories. For this reason particularly, one of their policy conclusions was that labour market policy might have to be differentiated for different parts of the unemployed, for the searchers and for the non-searchers, particularly because they had different location characteristics, different spatial characteristics.

Non-searchers also tended to be young, African and female, living in households with other non-searching unemployed individuals. This also suggested that labour market policy might have to be differentiated, not only locationally but targeting these types of people as well.

As job prospects in South Africa improved, the non-searching unemployed might begin to search. But if they were so totally discouraged, it might be possible to see more unemployment being generated at the same time if jobs were not created fast enough. It might be sensible to decentralize decisions about how to make the unemployed more employable to the provincial level or lower.

The authors examined possible active labour market policies, drawing on international evidence from Eastern European economies. These had been transition economies which had also experienced large unemployment rates throughout the 1990's. While the evidence was not directly transferable, the active labour market policies they implemented worked well because they were decentralised, because the policies were responsive to local labour market conditions and, to a large extent, the active labour market policies that succeeded were those which focused on skill enhancement and further training.

If South African labour market policy moved towards these active types of interventions, then it might be a good idea to focus on skills enhancement and further training. It was also clear that active labour market policies interrupted continuous spells of unemployment so that unemployed people were not stuck in long-duration unemployment in which their social skills and their other education effectively degenerated. In South Africa, where there was a large degree of long-term unemployment, it might be a recommendation to have active labour market policies which hooked people back into active participation in the labour market, rather than allowing the skills that did exist to degenerate further.

DISCUSSION

John Knight of the University of Oxford said that it had not been entirely clear what the authors had meant by labour force attachment. If it meant keenness to be employed, then it was not clear whether having four different classifications for the degree of attachment was actually helpful. The problem was that one could not assume that people necessarily chose their economic activity. They might, instead, have been forced into it. If unemployment was involuntary, then people who were unemployed might be just as keen to be employed as the employed themselves were, and the group out of the labour force could be a heterogeneous one and choice could range from complete choice to no choice at all.

Some people, say those who retired early, might have chosen voluntarily to do so. Others, possibly housewives and students, might choose to be out of the labour force now , but fully intended to get a job later. They had withdrawn from the labour force to rest, or to rear children. Yet others, and again, they might be housewives and students, chose to be out the labour force but would be in it if labour market policies could measure up. Some people, for instance, disabled people, simply could not work, they had no choice. Because it was a heterogeneous group, the economically inactive might not be easy to characterise as a group. The authors had presented some interesting statistics of household composition, including the labour market status of other household members.

Now, assuming that they had constructed this variable correctly, it would be a very interesting result. There was a powerful tendency for the employed to be in households with other employed, for those searching unemployed to be in households with others who were unemployed and searching, for the non-searching unemployed to be in households with non-searching unemployed and for those who were out of the labour force to be in households where there were other members who were out of the labour force.

Also, the average household size was smallest for the employed and largest for the unemployed. There might be two counteracting forces at work here. On the one hand, one could expect people without income to try to attach themselves to households with income, with other sources of income. Research had found that some households tended to be endogenous and to adjust to high levels of unemployment by expanding to share income in mutual support units. On the other hand, the economic activities of co-resident households very often depended on the precise circumstances of the locality in which they lived. So the bunching which is found in the authors' descriptive statistics, suggested that this factor might actually dominate. In his own research with Geeta Kingdon, Knight had found that unemployment of other household members increased the probability of a worker himself being unemployed, but they had found that this result could be collapsed when they included 360 cluster dummies representing local conditions. The bunching seemed to occur at cluster level.

The authors had found fairly clear distinctions between unemployment and being out of the labour force, but they found little distinction between the searching and the non-searching unemployed, except for the variable "urban" as opposed to "rural" and having a high local unemployment rate. Being rural and living in an area with high local unemployment reduced search. Now, in terms of their categorisation of different degrees of labour force attachment, one might predict that the probabilities move monotonically, in the order of searching unemployment, non-searching unemployment, out of the labour force. In fact, the tables showed that there was a robust monotonic relationship only for a minority of the variables.

The most striking one was having matric, which increased the probability of being unemployed and searching and decreased the probability of being out of the labour force. Knight said he interpreted this as the tight labour market effect.

The other interesting variable was having a migrant in the household, which reduced searcher unemployment and raised the probability of being out of the labour force. This might reflect the reduced need for income if one could rely on the remittances of the migrant, but might simply be serving as a proxy for location. The lack of monotonicity in these results suggested that the out of the labour force category might be too heterogeneous. He and Kingdon had, less ambitiously, compared just two of the states described, trying to contrast the people who were unemployed and searching from those who were unemployed and did not search.

They had found rather more significant results than the authors were able to get. These included the fact that older unemployed workers were more likely to search, as were men and household heads. Comparing across education levels, those with complete secondary or higher education were more likely to search. The specification of the rather endogenous income variable produced a negative, sometimes significant, sometimes not significant, co-efficient. It seemed that poverty hampered search, possibly because of the liquidity constraints implied.

Kingdon and Knight's proxies for remoteness reduced the probability of search, no doubt reflecting the high costs of search from remote localities. They had also found that the local unemployment rate reduced search, which suggested that searching depended partly on the intensity of need for employment, age, and male household head. But it also depended partly on the cost and the prospect of success, education, remoteness, poverty, and the local unemployment rate.

Dinkelman and Pirouz had given a good account of how the classification of people into the four economic activities depended on the wording of the questions in the questionnaire and even on the skills of the interviewers.

One might learn a lot more about the nature of joblessness if, in a subsequent October Household Survey, people were asked to explain what they did in the previous week, day by day, what their activities were. It would be interesting to see whether, in fact, people who were allegedly jobless, did various economic activities which, under the present set of questions, were not recorded as economic activities.

GALA DINNER

TRADE NEGOTIATIONS, POVERTY AND FOOD SECURITY IN DEVELOPING COUNTRIES

Sherman Robinson, division director of the trade and macroeconomic division, International Food Policy Research Institute

Trade had grown much faster than GDP and had become an engine of growth for many economies. While developing countries as a group had partaken of this growth, the growth had been concentrated in the north between the OECD countries rather than being north-south or south-south. Countries that had expanded their participation in world markets had performed better than countries that had not. The old debate between import substituting industrialisation and export led growth was a thing of the past.

It had been argued that the least skilled labour forces were not very much involved in the production of tradables and in most developing countries, they operated in the informal or "murky" sector of non-traded goods, but the problem in South Africa was that not only was the murky sector murky, it was invisible. In Istanbul or Hanoi, one could walk down a few blocks and see a street full of bicycle repair shops, and another street where they were all doing shoe repairs or small furniture production or small metalworking. Robinson said he had not seen this anywhere in South Africa.

Presumably the informal activity was there, but it was probably isolated in the former homelands and, as had been said earlier in the day, nobody ever made a lot of money selling to other poor people. What was therefore needed was to increase the traded goods production, and at the same time increase employment, in the informal sector.

Since the end of World War Two, there had been a series of trade liberalisations under the auspices of GATT, which was now the World Trade Organisation (WTO). Through that whole period, the OECD countries had set the agenda, run the negotiations and the interests of developing countries were basically not considered at all, or only after the major countries had settled their deals. During that period, the institution in which the developing countries could air their grievances was UNCTAD's Group of 77, which supported preferential agreements under the Lome Convention, but had very little influence on the GATT negotiations. UNCTAD could not then, and certainly could not now, provide an institutional framework for any kind of LDC bargaining bloc.

Now that the Uruguay Round was completed, there was a consensus out there that Africa got the short end in terms of trade losses and not particularly good access to markets. It got some sops at the end in the form of the Marakkesh Declaration, but it always came after everything else. With the WTO, many different trends were emerging. First, there had been a proliferation of regional preferential trade agreements or free trade areas. Second, the WTO was now a bigger organisation than GATT and many of its members were LDCs. About a year ago, it had 134 members, 70% of which were developing countries.

Thirdly, after the fiasco in Seattle, it was clear that the major players were simply not prepared for the negotiations. It was much more a politically-centred event compared to the previous negotiations, which had been between professionals, economists and trade lawyers. It had been done very quietly and then it would hit the Congress, where there would be a little bit of a flutter, but it always passed. The role of the developing countries was also very different and had been important at Seattle in terms of issues such as labour standards, which had been extremely unpopular.

Now, as the world moved into what was hoped would be the Millennium Round, the interesting question was whether the WTO would recover from Seattle. This certainly would not happen until a new Administration was in place in the US, but there were agricultural talks that could go on anyway and had already started.

If one looked at trade negotiations in general, WTO now had a lot more developing country members and, institutionally, both the WTO and the major players had not yet decided how they were going to work the system. In the past, there were generally three phases in trade negotiations. The first started about a year before the negotiations and even extended into the year of actual negotiations. A set of strategic phases defined the agenda, alliances were made and the broad sectoral and regional trade-offs were determined. This required a lot of sectoral analyses. Countries needed to know the economic consequences of the different scenarios that were being talked about. It was crucial for developing countries to figure out their interests, who were the winners and losers, who were their natural allies and opponents. In that phase, there was a major role for trade economists.

The second level was getting into detailed negotiations. This covered sectoral and product negotiations and one needed detailed knowledge of the effects on producers, consumers and interest groups. This was not the forte of trade economists and was best handled by industry and producer groups in close liaison with the negotiators.

The last phase was the writing of the agreement, and here it was advisable to have the best legal minds available. In all these phases, it was very important to remember that negotiations required diplomatic negotiating skills and it did not help to simply complain in UNCTAD. This called for people who understood the political economy of their countries and of their negotiating partner countries.

Take the EU-South Africa free trade agreement. The deal was done and all but signed when the EU said it had to go back and consult with various countries. It then said that the Portuguese, French and Spanish did not like it. The terms "port" and "sherry" were raised and the US objected because it could set a precedent and get its producers into trouble.

The problem now was that the WTO had too many members. One could not negotiate with hundreds of people in a room. If the developing countries were to become effective negotiators, they had to work out effective negotiating blocs. The WTO was just too unwieldy, as was shown by the strains at Seattle.

It was in the OECD's interests that such negotiating blocs were formed because it would make the negotiations possible and more efficient. There was one example of that in the Uruguay Round in the form of the Cairns Group, which had 15 members and was basically an organisation of agricultural exporters who claimed to be non-distorting in their domestic markets. It was dominated by Australia and Canada but included Argentina, Brazil and smaller countries such as Paraguay, Thailand, Uruguay and Fiji. South Africa was now a member and shared interests with the Cairns Group although it also probably had interests that diverged from the group as a whole. South Africa needed to do the analytic work that would enable it to carve out a place for itself in the group given the dominance of Australia and Canada. But it was a good institutional structure that could serve as a model for others as it was focused on common interests, refused to consider anything outside its narrow area of interests and had good analytic support. The Uruguay Round focused on agriculture and there had been significant policy reforms in developed countries, even though they were far from perfect.

In examining agriculture around the world, one needed to categorise countries by the role of agriculture, issues of food security and trade flows. There were about 84 low-income food deficit countries with a combined population of about 3.6 billion (including China and India), and there were the sub-Saharan African countries. The former were net food importing countries which wanted low world prices for their imports, and the latter were roughly aligned to the Cairns Group and other exporting agricultural countries, which wanted higher world prices. Neither of these two groups wanted to see more price volatility in the world market. The Uruguay Round did actually have some impact on this in trying to eliminate unfair competition from subsidised agricultural exports which could hurt the poor agricultural producers in developing countries. But more clearly needed to be done, especially in the EU, which did things like subsidizing exports when world prices were low and taxing exports when world prices were high.

Clearly, it was important to strengthen those disciplines and focus on issues of domestic support in the developed countries, which was generally not a very good thing for the developing countries. This part of Africa also wanted improved market access for developing countries to developed country markets.

The major growth in agricultural export earnings almost all over the world was the growth of high value horticultural exports. They were labour intensive, needed all sorts of marketing margins but were very profitable and very subject to restrictions in the developed world whenever they saw their interests being threatened.

Price volatility was a big issue. The reform of domestic agricultural policy in the OECD countries had led to much less public storage of grain in the US and EU. That had the potential of increasing volatility in world prices while also making supply more adaptable. No one wanted to make this situation worse through, for example, the EU's policy of subsidizing exports and dumping it into the world market when prices were low or taxing exports when prices were high.

To enter this new WTO, countries really had to get involved. It required a different mind-set, a different set of skills and it was very important to build on that. Agriculture was certainly very important for developing countries and it would be important to get the developed countries to continue their commitments made under the Uruguay Round.

It would also be in the interests of developing countries to ensure that the trend towards a transparent, rule-based trading system was continued. These countries were hurt when arbitrary dumping practices crept in and tied up their domestic policies.

Asked whether there might be conflicts of interests for South Africa in its cross-cutting membership of both SADC and the Cairns Group, Robinson said this was possible and that the Cairns Group might not be very interested in SADC-related issues.

GLOBALISATION, VALUE, RIGHTS AND WORK: POSITIVE OR NEGATIVE FLEXIBILITY FOR SOUTH AFRICA?

David Fryer and Michael Newham, Department of Economics and Economic History, Rhodes University

The authors started their paper with this intriguing quote: "...something fundamental, something transformative, is happening to industrial relations and labour law. We are not quite sure what that something is...." (Arthurs W.H. 1997 'Labour law and industrial relations in the global economy', Industrial Law Journal.

Their paper, they said, explored "what that something is" and suggested that a paradigm shift was needed for constructive thinking about labour relations.

There was no doubt, they said, that unemployment had become an intractable problem in South Africa, possibly because it had been looked at in the wrong way by concentrating on labour market policy and using labour law as policy - and the burden was too much for it to bear.

The consequences could be seen in the fragmentation of the labour market on the demand as well as the supply side. Informalisation, people finding ways around the rules and voice regulation were not really things that worked in the environment of globalisation. There was no evidence of any Third World country that had been able to institute democratic corporatism at any time, let alone when globalisation made it more difficult to achieve any sort of closure, to capture capital. It was clear that globalisation could involve a "race at the bottom" scenario, in which capital shopped around for the cheapest labour and simply avoided areas where there were restrictive labour laws.

They said that they had identified two forces of globalisation. The first force was dissent against the old mould that said, developing countries had to export labour intensive primary commodities, import capital intensive manufactured products while developed countries followed disciplinary productionist values where people worked for a wage and spent their money on consumption.

The second obvious force was technology, which had the potential to lower transaction costs, particularly information costs. As a result, transportation costs had become more important as trade barriers, which might have negative implications for countries such as South Africa.

LEADERS, FOLLOWERS AND LOST SHEEP

The authors examined the experience of several countries under globalisation, starting with the United States. It had been characterized by "segmented work", or a bargain under which mainly white male workers suspended the class struggle in exchange for material wealth and security. By the 1970s, this bargain was under threat from increased foreign and domestic competition and rising wage premiums for unionised workers. Employers responded aggressively by demanding concessions from their workers during the depression of the 1980s. In the ensuing two decades of increasing globalisation, America grew into a service economy serving mainly business markets throughout the world.

This movement towards new work forms was disguised because of weak labour laws and the fact that employers did not have to use contract labour to break up the power of workers. "Segmented work" was replaced by "flexible production" as the dominant mode of production, resulting in rising inequality, low and stagnant wages in unskilled jobs and generally poor labour market access for the most disadvantaged communities. By contrast, Sweden was also a service economy, but the state was the main provider of important social services which, in America, were provided by the low wage private sector.

America seemed to capture the duality of globalisation in that it was very good for people who wanted and could cope with freedom, but it was a burden for people who were poor, socially dislocated and unskilled. Globalisation was great if one was flexible and well educated, but was "black rain for the poor". Australia had a similar "relaxed" institutional labour arrangement and development strategy. Since the early 1990s, there had been a shift from centralised intervention towards decentralised enterprise bargaining arrangements, which had stimulated the growth of non-standard work.

Together with relatively high unemployment, this reduced the power of workers to resist increasing insecurity of jobs and wages. The growth of services also played a role in generating a large number of semi-skilled contingent jobs while there was a decline in the standard or core workforce in all industries. Interestingly, Australia seemed to show an incompatibility of neoliberal programmes and a drive to higher value added. While those remaining in the core "protected' sector tended to be the more highly skilled, especially in terms of tertiary education, the reduction in the size of the core implied that there was a greater proportion of unskilled workers.

In Anglophone developed countries, there was probably little wrong with the policy towards the high value-added, skilled end of the market, with the lesson probably being that "less government is better". The problem was at the bottom end, especially for developing countries. If one was below a certain threshold, or in, say, the informal sector in South Africa, one faced poor jobs, long working hours, no protection, etc.

The three elements that determined one's position relative to the threshold were human capital, social capital and market capital. Human capital and market capital increased one's external flexibility. Human capital, obviously, meant that the more educated one was, the more one could handle being in the market. By market capital was meant that the better the market was, the lower the threshold in terms of human capital. Hong Kong had a "flexible" system of production for a long time, but although the state had played little part on the direction of economic development, this was not a model laissez-faire economy. Social expenditure was high, which supported the economic structure of small business by providing a high "social wage". This allowed small business to take risks to take advantage of product niches as they opened up. The dominant form of manufacturing production was through a hierarchical sub-contracting system of many, small-scale, family-centred export-oriented factories. These were connected to international markets via "buyer-driven" commodity chains. This implied a lack of control by small producers over product marketing and strategy and the need for a great deal of flexibility.

The result of all this had been that Hong Kong had failed to move up the value chain, mainly because its producers had never been forced to do so. Taiwan also had not had a laissez-faire economy, with little value placed on worker rights and the state, in the early years, playing a key role in the development of strategically important capital intensive industry. Light industry was deliberately left to the small business sector while the government also spent heavily on education. Again, fragmented small businesses failed to break through into the highest value added activities. Labour market tightening and creeping democratisation led to wage increases rather than productivity growth and when Taiwan came under pressure from low wage producers, the government unveiled a massive investment programme in infrastructure to force the country to make the "leap from mimic to innovator."

Japan had also become aware of the need to move towards a more democratic, consumerist society, but had found that this involved severe social and economic dislocation. With its hierarchical producer driven structure of production, its workers with poor human and social capital were trapped into a low wage labour market in which external flexibility was a weapon in the hands of employers. Although human capital (education) was important at the entry level, social capital was far more important and was enterprise specific. Once in, workers were socialised by management to identify with the firm and this was backed up by the low social wage provided by the government. Flexibility was provided by employers insisting that, in return, its "worker bees" worked long and variable hours.

Yet another approach was that of Northern European corporatism, which was best exemplified by Sweden. Here, social democracy could be called, until recently, "social dictatorship" in the sense that the central government interacted at a summit level with "social partners" (labour and business) while engendering a culture of rights and egalitarianism. Sweden appeared to exhibit the inflexibility that seemed to be the inevitable cost of entrenching a human rights culture, notably in the form of fixed-term contracts and extensive union powers, but the labour market was uniquely flexible and adaptable. This was made possible by basing human rights in "the security of wings" and not on that of the "mussel shell."

The institutional environment ensured that non-standard work was experienced in a positive way, which enhanced mobility in the labour market. There was an extensive welfare system, which raised the social wage and discouraged any move towards long working hours and low wages. Sweden had a slightly higher unemployment rate than the others, which was not an indication that it was doing badly. It reflected the fact that people were using the market.

THE SOUTH AFRICAN EXPERIENCE

South Africa had a strong commitment to corporatism, particularly the North European version which tried to reconcile workers rights and overall economic success. This was not appropriate for a developing country because of the sheer fiscal effort needed. Even Sweden had suffered from fiscal exhaustion, particularly of private taxpayers in the top brackets and small businesses, which was a major threat to the sustainability of the system. South Africa had policies that were essentially neo-liberal, although there were signs that this might change. It aimed at much more infrastructural investment and had a disjointed labour market policy which tried to protect people on the job. The natural result was that it had avoidance, informalisation, the system not working and conflict.

What it needed to do was reconceptualise industrial relations. The authors argued that South Africa had failed to take the bold step required to institute true corporatism. European social pacts had been struck at very specific junctures in history and required deep concessions by the social partners. In addition, the kind of corporatism envisaged relied too heavily on legislation to protect the rights of workers. The end result was that South Africa had failed to break the mould and had ended up with a "second best" option because the markets did not work and relationships were stressed.

South Africa had a relatively large share of people in formal employment but the experience in other developing countries had been that it was largely impossible to regulate the labour market. What had happened in Germany and Sweden was that everybody was part of the system and one could not get competitive advantage by being outside the system. And as the case of Sweden demonstrated, the system was not a cocoon but was one in which external mobility was fostered.

After an overview of South African labour regulations, the authors said there was a "nexus of bewilderment" about them - there was no overarching understanding of what the law as policy should be achieving. The various laws treated specific problems without attempting to understand their underlying causes and generally increased transaction costs at a time when globalisation dictated that such costs should be decreasing, not rising. They also encouraged confrontation rather than co-operation and were subject to widespread evasion and avoidance, creating insiders and outsiders.

The authors did not advocate a full-scale retreat towards laissez-faire and the resultant "race to the bottom", but a refocusing of state intervention away from regulation towards the development of human and market capital. Investment in infrastructure in particular would be important with the extension of rights being based on the ability to use the market, and not the artificial protection of workers within their jobs.

DISCUSSION

The paper naturally evoked heated discussion, especially from those fearful of letting markets loose on worker rights. The discussant, James Heintz of the University of Massachusetts, said the central argument appeared to be that globalisation, or deeper integration, required a transformation of labour law into a regulatory framework governing employment contracts in South Africa. The argument was that globalisation demanded greater flexibility and a much larger role for markets.

It had outlined two roads that could be taken - the high road and the low road. The low road scenario said that if globalisation demanded more market-based transactions, and one just rolled back labour legislation, you would end up with growing inequality. The high road scenario said one should change the regulatory framework, but instead of just rolling it back, it should be replaced with something else.

The argument was that the standard regulatory framework should be replaced with one that protected workers by providing alternative strategies as fallback positions for workers. In these two strategies, investment in human capital and investing in supporting institutions that allowed labour markets to operate much more efficiently were important.

This would increase the workers' exit options by making labour markets clear, more effectively. So, if workers not protected by traditional legislation needed to exit a labour market, investing in human and market capital could facilitate this. This would allow the worker to be re-employed at an equivalent position fairly easily. So making markets clear more effectively would replace existing regulatory structures that protected workers through unemployment insurance, or job tenure legislation, etc. Heintz said he had no problem with these arguments, but he was not persuaded by the argument that voice regulation was passe in the face of globalisation.

Recent literature had pointed to the fact that market solutions often led to inferior outcomes, with both parties worse off than if they had chosen the co-operative solution. The problem with doing this, however, was that a third party enforcement mechanism was needed to enforce the co-operative solution, as opposed to the exit solution. That was the regulatory framework. Alternatively, one could have some type of negotiating, bargaining type of process, in which the terms of co-operation was negotiated between the parties. That was the voice.

On whether trying to achieve co-operative solutions was undermined by globalisation, Heintz said this was not necessarily the case. Insofar as globalisation made exit options more attractive, increased capital mobility made the ability of capital to exit from these relationships much easier or more attractive. That made it more difficult to end up with a co-operative solution.

But on the flip side, if co-operative solutions were indeed seen as superior, that meant both parties were better off by co-operating rather than exiting, which was not inconsistent with globalisation at all. It did not compromise the competitive position. In fact, it could be argued that countries that had institutions that supported effective co-operative solutions could out-compete those that were based only on exit solutions.

The problem with supporting either a voice or a regulatory environment in the face of globalisation, was that sometimes the cost of achieving these welfare-enhancing solutions was quite high. The paper documented, in the South African case, that a whole series of inefficiencies and high costs were associated with aspects of the neo-corporatist and voice regulatory system, such as NEDLAC. A lot of resources had to be ploughed into the fact that the chambers in NEDLAC negotiated over non-negotiable policies while workplace forums had been effective in only a very few cases in achieving co-operative solutions.

If the costs of trying to achieve co-operative solutions outweighed the benefits in the face of globalisation, then maybe voice regulation was passe. But one could not necessarily look at existing institutions and say that they were all costly and no longer viable in South Africa. They could be the wrong kind of institutions or they might not be working well. If a country was going to invest in market capital, systems of voice regulation also required supporting institutional investments, such as in capacity building, dissemination of information, etc. If that was not happening, it could undermine the viability of voice regulation in the face of globalisation in South Africa.

The key provocative question in the paper raised was whether South Africa was basically "walking into the wind" in pursuing its current labour law trajectory, in terms of revising regulatory frameworks, in terms of trying to entrench rights and in terms of pursuing neo-corporatist and voice regulatory ways of dealing with labour market contracts and transactions? Or, in the face of globalisation, was a radical move to an exit base that was market oriented the best strategy?

Lisa Seftel of the Department of Labour said she had found the paper disturbing. Recent literature by the ILO about voice regulation had come to the conclusion that in the context of globalisation, voice regulation and good governance, particularly of the labour market, was critical. South Africa had to challenge globalisation and to seek to maximise the benefits, rather than to experience increasing inequalities and the problems associated with that. The paper had not engaged with that at all and it was "a bit steep to say that there's no place in any developing country where democratic corporatism has worked." One had to examine the South African situation on its own, not only in comparison to what could happen in other countries. She also could not agree that institutions such as NEDLAC were costly without taking into consideration its contribution to labour stability.

During discussion, it emerged that the ILO had released a global report: "Your Voice at Work", in June, which underscored the importance of a strong social dialogue and said it had to be maintained at all costs. The ILO had noted an "employment revival" in Europe, which supported this view and it had been inundated with requests from member countries on how they could revive their labour policy to meet the challenges of globalisation. Regulatory frameworks were being challenged simply because they had been enacted during the days of the import substitution and protectionism and people were asking how labour market policy fitted into a liberalized economic framework. It was clear that flexibility was important, but one should not throw out the baby with the bath water.

Sam Bowles of the University of Massachusetts said that to the extent that voice institutions and corporatist institutions were designed to lower the profit rate after tax so as to benefit workers, they were very unlikely to be successful under a highly globalised environment. On the other hand, there were lots of situations in which problem-solving could only be done through voice institutions. There were huge discrepancies between the best practice and worst practice firms, across sectors and so on. Not all of these, but a great many of these, were simply problems that needed to be solved, and they could be solved, in ways which did not lower the after tax profit rate, but did benefit the lives of working people because they solved production problems.

He did not entirely endorse existing arrangements and practices but said that those involved in voice institutions and corporatist institutions had taken it upon themselves to ensure that they were problem-solving, rather than redistributing income.

Fryer reiterated that he was not on a union-bashing crusade but wanted to highlight the fact that the whole approach to the labour market needed to be reconceptualised. There were both contestable markets and contestable relationships, which was why exits were needed. The nice thing about contestable market theory was that it told us that the market structure could look very different to a competitive structure. It could look like a monopoly, it could look like a voice structure. What was needed was to be cleverer about how to improve workplace forums while taking a hard look at the cost and effectiveness of regulations.

ECONOMIC POLICY AND WOMEN'S INFORMAL AND FLEXIBLE WORK IN SOUTH AFRICA

Imraan Valodia, University of Natal

The growing trend towards the informalisation and flexibilisation of employment since the 1970s had had a major impact on the work done by women throughout the world, with important policy implications for government, Valodia said. His interest in the theme had arisen out of his work on the gender impacts of government budgets and how expenditures and revenues might impact differently on men and on women.

An examination of key labour market variables for South Africa indicated that women were concentrated in the informal sector and, to some extent, the clothing sector. There were also large numbers of women in jobs such as teaching, nursing and some other professions. His key focus area, however, was the lower, more insecure, segments of the labour market, or what had been called the survivalist sector.

There were two major forms of atypical work, which was dominated by women. One was informal economy work that was not recorded in formal labour market data. This usually took the form of street trading and many forms of home-based work, although it could also take the form of highly skilled occupations that were carried out outside of the formal economy. The second was flexible work practices, which often took the form of numerical or occupational flexibility (multi-skilling), sub-contracting, some forms of home-based work, casualisation and part-time work. Collecting data on these various activities was difficult to impossible, mainly because much of it was unrecorded although the October Household Survey of Statistics South Africa had started probing this area. It had already determined that women made up 57% of those in the informal economy, Africans 83% of all people active in this sector and African women 49%. Domestic work formed the largest component of the informal economy followed by trade-related activities. Women generally dominated the low-skill occupations on a subsistence level.

Flexibilisation, which aimed to eliminate rigid job functions so that workers performed a number of different tasks (multi-skilling and multi-tasking), or introduced different working hours through shift work, was rapidly emerging as a major work-type. Recently, labour-broking and sub-contracting had also become more common. There were high levels of home working.

These trends had been given government recognition through the Growth, Employment and Redistribution (GEAR) strategy which, unlike the Reconstruction and Development Programme (RDP), had envisaged a more flexible labour market and, by implication, the development of a dual labour market - one with minimum standards and relatively good wages, and another with low standards and no minimum wage. This, it had been claimed, would reduce labour costs, increase investment and generate new jobs. The progressive trade union movement had hotly contested this. Trade and industrial policy since 1994 had also encouraged this move to greater flexibility in the search for better international competitiveness.

The most important aspect of trade policy had been trade liberalisation, which had shifted the economy onto a capital intensive and skill intensive path that favoured men and disfavoured women workers. Most of the job losses that had taken place had been in female dominated sectors such as clothing and textiles.

The department of Trade and Industry's industrial policy had been supposed to encourage the development of small, micro, medium and the so-called survivalist businesses but no support measures had been put in place for the latter while overall policy implementation for these sectors had been poor. Again, women, who dominated the survivalist segment, had been the most affected.

Labour market policy had undergone major changes to improve basic conditions of employment and provide greater employment equity, but it benefited organised workers the most with the unorganised workers – mainly women - being left out of the loop.

In terms of minimum standards, the new Basic Conditions of Employment Act was a vast improvement on past legislation, specifically with respect to issues such as pregnancy and working time. Of concern, though, was the fact that the Act made provision for "downward variations" for businesses that employed fewer than ten workers. This exposed the most vulnerable workers to much lower standards. On the plus side, the Act also aimed to tighten up on sub-contracting practices that were essentially aimed at by-passing labour laws.

The Employment Equity Act aimed to outlaw discrimination against workers on several grounds, including race, gender, pregnancy, marital status and family responsibility. Unfortunately, it also said that it was not unfair to "distinguish, exclude or prefer any person on the basis of an inherent requirement of a job". Given the pervasive nature of sexual stereotyping, this clause could easily be used to discriminate against women.

DISCUSSION

Lisa Seftel of the Department of Labour, the discussant, said it was clear that women, who traditionally had been at the bottom in terms of employment, were going to be the most vulnerable in respect of the impact of globalisation, restructuring and so on. She was not convinced, however, that women had lost the most jobs as a result of a decline in protection or an increase in globalisation. A much more detailed sectoral analysis was needed to examine the present trends in the employment of women, what the changes had been and what other factors led to those changes.

In the clothing and textile sector, for example, there had been a major dispute about the figures involved at the recent Clothing and Textile Summit. It appeared that in clothing what had happened was a displacement of people from formal employment to less formal work. This was not a desirable trend, but it was the reality although more research was needed to unpack the implications for men and women workers.

On trade and industrial policy, she said this had not focussed on the bottom tiers where women were most likely to be. It had focussed more on the sectoral levels. But if one wanted to look at government policies in respect of supporting survivors, enterprises and small market enterprises, one should not only look at trade and industrial policy, but also at developmental policies, or job creation programmes that targeted women.

The target in the Working for Water Programme was to get something like 60% of the participants to be women. Quite an important effort should also made in work programmes to provide women with training, including things like adult basic education, basic entrepreneurial skills and so on. These would be a step up for the women who were the most vulnerable.

On the labour market, she agreed that women were predominantly left out of voice regulation and were more concentrated in the informal sector, which was less likely to be subject to voice regulation. As to the aims of the various labour laws not being achieved, she said it still had to be established what the real impact of the new laws was - and this was where researchers could play an important role.

The unions and others had criticised downward variation, but women had to be asked what they felt about this. Many might want more flexibility because they had children, because they were single, or running single parent households. That had been the experience in European countries. Sunday work was a very controversial issue and one could say that this was bad for women because it took away more time from their family. It might also be easier for a woman to work Monday, Tuesday, Thursday, Friday, and Saturday and on Sunday, when her husband might be at home, or a granny might be at home, on a Sunday to look after the children. They could be at home in the week to do domestic chores, do homework with their children, fetch their children from school and all the other things that women are forced to do in a society which did not create other mechanisms to assist women. So, it was important not to just accept that because a law improved the rights of women, that the rights of women really were improved. It was also important to look more carefully through a gender perspective at how laws impacted differentially in terms of the conditions that women faced.

The solutions to the problems faced by women did not lie solely in industrial policy and labour market policy. It lay in a combination of gender policies. Some of the work of the Commission for Gender Equality had been good, but there was a lot more work still to be done in South Africa in terms of raising and profiling the issues of women. One of the weaknesses, not only in government, had been the post-1994 decline in the strength, power and influence of women's organisations in the NGO sector. Trade unions also had to take up women's issues more strongly. Neva Makgetla of COSATU said it would be useful to examine what supply side policies did to the gender patterns in the formal sector. If they entrenched existing gender patterns, what did that mean for employment equity?

Nikki Cattaneo said that there was definitely a rising trend towards informalisation and more flexible work practices but that the levels were not very high in the overall economy yet. It would be especially interesting to know what impact they were having on women and whether they were really inherently bad for women.

Valodia admitted that his research had been fairly elementary so far and the key challenge would be to employ more systematic methods to pin down some real numbers. Most of the job creation programmes were fairly short term and although they had done quite well at targeting women, these were extremely short-term solutions. When one coupled that with the fact that it was probably the case that women workers had to bear the brunt of trade liberalisation, the positive impacts were quite small.

On the actual impact of the new labour laws, some work had been done and should be studied in detail. But it appeared that a lot hung on perceptions. There was a perception on the part of many of employers that the Basic Conditions of Employment Act was an extremely onerous piece of legislation. Personally, he did not think the impact was all that high. Most of the problems with the labour laws revolved around how some of the institutions worked and the enormous amount of time that employers need to devote to sorting out labour problems in the CCMA.

UNEMPLOYMENT IN SOUTH AFRICA: THE NATURE OF THE BEAST

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The intellectual puzzle of South Africa was that it had one of the highest unemployment rates in the world at 39% on the broad definition in 1998 and 26% on the narrow definition. This was of concern for a number of reasons. It reduced output and wasted productive power; it eroded human capital because of the depreciation of unused skills; it led to social exclusion; it could cause suffering, deterioration in family life and in social values; it could induce discouragement, resignation and loss of morale. However, these potential costs depended on the nature of the beast. Was unemployment voluntarily chosen leisure? This was an emotive question, but important because the alternative interpretations of unemployment carried with them different ethical and policy implications.

There had been heated debate in South Africa about whether unemployment in rural areas was voluntary or involuntary. Those who had held the view that it was voluntary had argued that rural-dwellers chose to be unemployed because of the income available from household agriculture. This view had been challenged by those who had pointed to the lack of productive activities available at the margin to rural dwellers.

The ILO had raised the notion that people with access to non-earned income might be voluntarily unemployed. Then there had been the debate about the appropriate definition of unemployment - whether to use the narrow measure (excluding the unemployed who wanted work but had not searched actively for it over the past week or month) or the broad measure (including this group). The ILO suggested that the broad measure could exaggerate the level of employment and Statistics SA had decided to exclude the non-searching unemployed from the official definition of unemployment.

The issue was an important one because it could affect ethical and policy judgements about the size and the urgency of the unemployment problem. The authors applied various tests to examine whether search unemployment and non-search unemployment were distinct states and, if they were distinct, whether their differences could reveal the reasons for lack of search.
First, they found that the non-searching unemployed were distinctly more deprived than the searching unemployed.

Second, they estimated probit equations predicting whether unemployed workers searched for work or not. They found that search was hampered by poverty, by cost of job search from remote rural areas and by high local unemployment.
Third, using an attitudinal index of happiness, they found that the non-searchers were not significantly happier than the searchers. Unemployment depressed their wellbeing to the same extent as it did the searchers.
Fourth, they examined the relationship between local unemployment rates and local wages and this indicated that local wage determination was affected by the broad measure of unemployment rather than by the narrow measure of unemployment. So local wage determination took non-searching workers into account as genuine labour force participants. It was theoretically predictable that the decision of unemployed people to search for jobs was endogenous and would depend partly on the level of unemployment. Also, there was evidence for South Africa, as for various other countries, that many jobs were obtained through contacts and that this process of getting a job through contacts required patient waiting rather than active search.

After combining the theory with this evidence plus the results of their tests, they drew the conclusion that many of the non-searching unemployed, although they were discouraged, did remain part of the labour force. Policy makers should therefore pay heed to the broad unemployment rate rather than the narrow.

When examining the incidence of unemployment, it was important to make a distinction between the level of unemployment and its incidence. The Household Surveys enabled the authors to identify the characteristics of workers which made them more likely to be unemployed, but these characteristics might simply order the queue of applicants for employment. So improving the characteristics of a worker might improve his chances of becoming employed, but it did not necessarily reduce the level of unemployment.

Using the broad definition of unemployment, it was seen that the older a person, the less likely he/she was to be unemployed. The more education they had beyond primary, the more likely they were to be employed and not unemployed. Men had lower unemployment probabilities than women. People in urban areas had lower unemployment probabilities and African people had higher unemployment rates than did the other races.

It was useful to separate the incidence of unemployment into two components - the chances of entering unemployment, and the duration of time that people spent once unemployed before they became employed. Key findings of this study were that of all the unemployed, 62% had never worked before, and that of those who had worked before, 25% had entered unemployment voluntarily. Seventy five percent had entered involuntarily from retrenchment or lay-off or illness or end of a temporary contract.

In addition, the older they were, the more likely they were to have worked previously. The most striking result was that race had a powerful effect on the probability of ever having been employed before. The probability for Africans was 35% lower than for whites, and the other races were in between.

Duration of unemployment was found to depend on the rate at which job offers were received and the extent of which offers were accepted. The average duration of unemployment was remarkably high at 37% at three years and no less than 68% of the sample had been unemployed for over a year.

If one combined entry to unemployment and duration of unemployment, and examined the incidence of unemployment at a point in time, it was clear that the young had the highest unemployment rates. Only beyond about the age of 50 did unemployment begin to edge up again.

Education reduced unemployment and unemployment was lowest for the highest educated graduates. Curiously, possession of a vocational diploma did not help one get employment. Other things being equal, men had lower unemployment rates than women. Again, holding everything else constant, Africans had much higher unemployment rates than other races, especially whites.

The authors then looked at remoteness and found that both the location in a former homeland and the distance from the nearest telephone increased the probability of unemployment.

Thus, avoiding unemployment was partly a matter of having education and labour market experience. The market for skilled people was tighter than the market for unskilled people. This was consistent with the notion that the market for skilled labour cleared, whereas the market for unskilled labour failed to clear because there were wage flaws. However, there might also be elements of internal labour markets in which the experienced encumbents were protected against the competition from labour market entrants.

Locality was also important because of the higher search costs facing workers in remote areas while the quality of education as opposed to quantity was also a factor.

This study was based on the 1994 October Household Survey. Since then, not much appeared to have changed, although it appeared that social networks had become very important for gaining access to employment and to jobs.

POLICY IMPLICATIONS

One had to be careful in attempting to draw policy conclusions from the analysis, bearing in mind that the analysis told of the characteristics of the unfortunate people who were liable to be unemployed. Improving the characteristics might improve their position in the jobs queue, but it might not reduce the overall rate of unemployment.

Education was the most obvious policy variable and might well have an absolute effect as well as a re-distributive effect. It was possible that expanding education would indeed reduce unemployment. The mechanism would be to increase the supply of skilled labour for which there was market-clearing, and decrease the supply of unskilled labour for which the market failed to clear and there was a surplus of workers. Decisions about education should be taken on the basis of proper cost benefit analysis and not simply because it could reduce unemployment.

DISCUSSION

The discussant, Sam Bowles of the University of Massachusetts, said the paper was persuasive but he had to raise one or two possible objections. There was some evidence that the unemployed were significantly worse off, both objectively and subjectively. But the authors asked one to believe that the unemployed were just the same as the employed. They were not substantially different, they just happened to be unemployed. But people were heterogeneous in lots of ways that were not measured and the reason why they had less income and lived in less adequate circumstances was not entirely attributable to their employment status, but rather to something else about them.

He realised that further data not now available would be needed to tease out these differences, but believed it was worth pointing out this problem. The authors had also said that in order for unemployment to be voluntary, the unemployed should be happier, or less unhappy than the employed would be. He did not believe that this was true. Of course, the unemployed were likely to be less happy, but this was not necessarily the case. Looking at the issue in this way could separate out people into the materialists and the hippies in terms of how they valued their wages and what they could buy, and how they valued leisure. Those who valued leisure more than the goods they could buy could possibly choose not to work, or be voluntarily unemployed.

Then, one had to consider the average level of happiness of those who were employed and it might appear that the employed are indeed happier than the unemployed. That falsified the authors' conclusion that by looking at the subjective well-being of the two types, one could get a clear inference about the unemployed. Because the unemployed were less happy, they said that they had to be involuntarily unemployed.

What was really needed was to ask somebody who was currently unemployed whether they would rather have a job at a certain rate. They would probably think you were crazy and say that of course they would like the job, no matter what the economists might say. So, it had to be determined whether the voluntariness of employment or unemployment was the right question to ask. Bowles did not believe it was. It was not voluntary but was chosen.

Involuntary unemployment meant that a person said: I will not take a job which is available at whatever rate that job is being offered. So, there had to be jobs being offered which people who were currently not working were refusing to take. To eliminate involuntary unemployment overnight, all one had to do was to create a few unacceptably horrible jobs!

What did this seemingly ludicrous suggestion tell one? It told something about the whole notion of the involuntariness of unemployment, which was part of an old discourse in which people only thought about reasonably good jobs and not about informal employment or plain lousy jobs. The truth of the matter was that today there were a vast array of jobs, some of which were truly, despicably horrible, that nobody ought to ever accept. And the fact that there were some of those out there in no way exculpated the economy and said: Everything's okay.

This linked up with the authors' position on reservation wages. When some people were asked what kind of wage they would accept, they were accused of bargaining when they might just be dignified people who said: I wouldn't accept lower than that. I'm sorry, that's not fair, it's not reasonable. So, an essential component of human well-being was a sense of justice and fairness. People who acted on that motive and refused a job because of that, ought not to then be beyond our concern just because they turned down a job which was unacceptably horrible or terribly unjust. It did not make them somehow beyond the pale or outside the policy net just because they happened to have values sufficiently strong enough about the question of justice that they would not take a job which was horribly, unjustly exploitative of them.

Reciprocity motives were very important. People acted on them all the time and one ought to attribute those motives to other people like the unemployed. They ought to be honoured instead of being dismissed because they would not take on a horrible job.

SKILLS AND LABOUR MARKET POLICY

1. THE GOVERNMENT'S ROLE IN SKILL DEVELOPMENT; TWO CONTRASTING APPROACHES

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The paper explored the contrasting ways that the Anglo Saxon and the Asian Tiger economies handled skill formation, or the process whereby individuals acquired the skills needed for everyday living and gainful employment. Three main areas were covered - co-ordinating the demand and supply of skills, enhancing the skills base and rewarding the acquisition of skills.

The Anglo Saxon approach was one in which the principal mechanism for skill formation was the market. The role of government was kept to a minimum with the market being relied upon to adjust the demand and supply of skills, to determine the stock of skills in the economy and to determine the rewards that individuals received for the acquisition of skills. The role of government was to support the market, remove barriers to its operation and intervene only in the case of market failures, such as those which occurred through unemployment. The countries which followed this model included the US, UK, Canada, Australia and New Zealand.

The Asian Tiger approach was one in which government action was used to help structure the operation of the labour markets. This might be to help speed up adjustments in the labour market and to shift the basic equilibrium within which the market operated. It might also involve influencing the level of rewards individuals received for their skills. Government action was an integral component of the labour market. The countries which used this approach were Singapore, South Korea and Taiwan, although elements of it were found in Hong Kong.

The two approaches represented very different ways of tackling the process of skill formation. Neither was regarded as being better than the other. Rather, each was seen as arising out of very different geo-political conditions. However, both represented different options from which governments seeking to develop their economies could draw inspiration in their attempt to industrialise in the different context of the contemporary world.

The data used came from research conducted by Ashton in the Tiger economies, and a major survey that was conducted by both authors in the UK. Economists had traditionally measured skills through the use of qualifications, or sometimes training days, length of training, etc but the authors' UK research provided a data set which allowed them to look at specific skills.

In general, the market appeared to be working quite well in the UK and in the US in delivering skills. There were problems, however, and the market itself had been somewhat slow in adjusting. This was probably because of the way in which the market operated. Employers would identify skills shortages and increase the price of labour for those skills. That sent a market signal back, in many cases, to parents who then influenced their children to acquire those skills, and the parents put pressure on the technical colleges to provide more appropriate courses. The result was a long feedback time in which the system adjusted for the output from the education and training system and adjusted to the needs of employers.

The situation was different in South East Asia because of the speed at which they grew. In one generation, places like Singapore had gone from high levels of poverty to a standard of living which was now well in excess of that of the UK. They could not rely on the market because it was just too slow, and government had to intervene to speed up the market. Government action was an integral part of the market. In the 1950s and the 1960s, the Tiger economies achieved full employment very rapidly. Singapore, for example, had an unemployment rate of 17% and within 10 years it got it down to 3%. Economists tended to assume that happened because of the market operating, it was, but the government helped it tremendously. It was unpalatable help because it suppressed the trade unions. In Taiwan and South Korea there was a violent suppression of trade unions to keep the price of labour down.

In Singapore, Ashton had spoken to some of the original politicians of the 1950s and the 1960s, and they had said they realised that they had to attract foreign capital. They knew that - there had been a Communist group of trade unions and a more moderate group of trade unions - these were dominated by the Communists who wanted wage increases even though there were still high levels of unemployment. These political leaders made a deliberate decision to smash the Communist trade unions and they then developed the more pliable Singapore National Trade Union.

But it wasn't just a question of repression. They had also talked to people in the community and said to them: "Our policy is not to raise the income of those in employment by 10%. If we do that and you've got five or six people in your family, you get 10% increase in your income if you've got one person employed. However, if we can keep those wages down and bring in more employers, we'll create more jobs. You've got to get two people in your family a job and your income will double."

They used these kinds of arguments to literally win the hearts and minds of the people. So what appeared to be the functioning of the market was, in fact, tremendously levered by the actions of government, which became an integral part of the market.

The Anglo Saxon approach was legitimated through the human capital theory that the market should be the only mechanism, and that the governments should stay out of the market apart from addressing market failures. It worked better in the US than in the UK because the US political system was highly decentralised. The Federal Government had very weak central powers and the market clearly appeared to be the most effective way of co-ordinating the 50 economies in America. In Britain, the state was stronger and had attempted to intervene in the market in a number of areas, particularly in skills formation through the industrial training boards. But employers objected to that and they were abandoned. There was an attempt to set up a highly centralised manpower services commission but Margaret Thatcher objected and got rid of it. The UK now followed the American example of letting the market determine the supply of skills.

The authors' recent research suggested that the qualifications required for a job was the major determinant of pay. In areas of skills shortages, such as computing, there were five different levels of computing skills needed and a premium of 13% was paid for these, which seemed to indicate that the market was working.

However, there had been problems with it. The available skills in the labour force did not match those demanded by employers. About 32% of the people asked whether their job required qualifications said no, but only 19% didn't have them. In other words, the labour market was over-supplied as there were more people with qualifications than there were jobs that demanded them. About a third of UK jobs did not require any qualifications and there was a mismatch between the output of the education system and the demands of employers.

However, there was a tendency to only focus on one aspect of education. It had to do with much more than just supplying skills to the labour market. It had to create citizens, it was an important function in terms of nation-building, and these issues tended to be ignored in discussions on the labour market.

The authors had also found that some skills demanded by employers were not being rewarded in the labour market. These skills included numeracy, planning and some communication skills but there was no link between the acquisition of these skills and pay, indicating a market failure. There were also periodic skills shortages, hence the attempts to intervene through the industrial training boards.

It was useful to make a distinction between what was called internal and external skills deficiencies. External deficiencies referred to things like formal technical and professional skills, where there was a shortage at the top end of the market. Internal deficiencies referred to the mismatch between what the employer required in order to achieve business objectives, as opposed to the kind of skills that they had at the moment. It had been found that there was a shortage of problem-solving, communication, team work and related kinds of skills at a lower level of the labour market.

At the other end of the scale, none of the Asian Tiger economies had, until very recently, left it to the market to deliver skills. Governments had influenced the demand side of the equation and had influenced supply through a very highly centralised control over education and training systems. They developed mechanisms to link demand and supply to short-cut the workings of the market, and there were good reasons why that was successful.

They had influenced demand through trade and industry policies. In Singapore, the government decided that multi-national corporations were needed to provide the capital that could not be generated internally. In Taiwan, the government relied on indigenous capital and SMEs to push industrialisation, although it was led by one or two large corporations that the government instigated. In South Korea, the government relied on the Chaebols. They put money into, and helped develop these giant corporations and relied on them to push the process of industrialisation. But, again, they were quite tightly controlled and influenced by the government.

The demand for skills went through two phases in all these countries. In the first phase, in the first 20 years between 1950 and 1970, the demand was for disciplined labour, for literate labour and, in a sense, a fairly passive labour force. Skills levels were very low. All that was needed was basic numeracy and literacy but the labour force was highly disciplined and was used to develop industries. The governments relied mainly on a primary education system to deliver the basic skills needed. This was a cheap way of skilling the labour force.

The problem they faced after 1970 was when they started to move up the value-added chain, or into higher value-added products and had to consider how they could transform the education and training system to deliver the technical skills needed.

Singapore, which had been saddled with a very bad primary education system by the British, had workers who were actually not even up to primary education level. So the government instituted primary education for the whole population and experimented with different concepts. When they got to the end of the 1970s, they realised that they had to go upmarket and they introduced vocational education into the schooling system. But that failed because the parents and learners did not want it because it was seen as being of a low status. In order to enhance the status of technical education, they said no one could start it until they were 16 years of age and had been through general education. They set up the Institute of Technical Education in Singapore to provide the technical people for the new jobs that were being created.

South Korea and Taiwan tackled it in a very different way. They introduced vocational education into the curriculum, but they then introduced quotas so that they could adjust the proportion of learners going through academic and vocational education. As the economy started to gear up and the demand for technical skills increased, they could increase the flow of learners through the vocational education system to produce the technical skills needed by the employers.

These approaches were not without problems. South Korea still had problems getting parents to accept the vocational schools. Taiwanese parents did not like them either, but they were forced by the government to push their children into them. It was effective because the governments had a prior knowledge, or a better knowledge than the parents, of what skills were going to be in demand. This was because their industrial strategy indicated that they were going to grow certain kinds of industries that would require certain types of skills. The government used that information to determine the output of the education and training system.

All three countries had "super-ministries", usually the Ministry of Trade & Industry, which were the dominant ministry in government, rather than the Finance Ministry as it was in the UK. These ministries had crucial representation on all the training decision-making bodies and carried the most weight. In Singapore, it was done through what they called the Economic Development Board (EDB), which was a part of the Ministry of Trade & Industry. The EDB had a remit to attract new investment, and in the 1970s and 1980s it was to go into high value-added forms of production, so they would only bring in the capital that would enable them to move in that direction. As soon as they had the companies signed up, information on what skills they needed would be fed through to the Council for Professional & Technical Education. That council then looked at what the demand for labour would be, what types of skills were required and then looked at what the education and training system could deliver. It would then make decisions about how to change the education and training system. Of course, there were gaps and those were filled by bringing in skilled labour from outside when it was clear that they just could not, under any circumstances, deliver the kind of skills needed.

At the moment, these countries were very short of R&D skills and they were targeting people from outside because they had realised that, even with the expansion of their own universities, they could not deliver on those needs. All this meant that these countries were able to constantly adjust the supply of skills onto the labour market as the demand for industry changed.

This helped produce very rapid economic growth without experiencing acute skills shortages. Of course, they did have skills shortages but they were not so acute that they held back the process of economic growth. Again, there had been some problems. There was the problem of picking winners, and they did not always get it right. But research had shown that they could very quickly rectify mistakes. This was partly because there were no major interest groups that could interfere. Because the state had a high degree of autonomy, it could act independently of business or labour interests and make changes in policy very quickly.

From an Anglo Saxon point of view, the big problem with this approach was the restriction of parental choice. In South East Asia, particularly Chinese societies, there was tremendous respect for academic education and if the parents had had their way, most would have chosen to send their children to conventional academic schools. But the government literally forced learners into a different type of education in order to meet national needs. That would not go down very well in the UK or the US. Educational institutions also had very little autonomy. In Taiwan, appointments to university were politically controlled. In Singapore, there were quotas established by the government at higher education level as to what percentage of learners could be taught what subjects. But the benefit was that it had delivered a very high level of economic growth.

When it came to enhancing the skills base, the Anglo Saxon approach was again a fairly basic one in which the state did not interfere and there was what one might call a front loaded education and training system. If a country wanted to increase the supply of skills, all governments could do was to increase the throughput through the education and training system, to up the skills or qualification levels as the learners came out of the education system. But it was a slow business.

When it came to interfering more directly in the labour market, then individuals and employers were left to their own devices. Certainly, the UK government would not countenance interference with employers when it came to training. Training was clearly the responsibility of the employer and the individual. It would help the individual, and to that end, the UK recently introduced what they called Individual Learning Accounts in which they gave everybody, as they left the education system, 150 pounds. This could be spent on training, even though that amount would not go very far, but the idea was to facilitate individual choice within the labour market.

All that the government could really do with employers was to encourage "investors in people" programmes, something which might be introduced in South Africa. This was, however, a purely voluntary measure and was a standard against which one could assess the training system. This had been very effective in the UK and was one of the best measures the British government had introduced in the last 20 years in that there was some evidence that when it was introduced effectively, then it upped the skills of the labour force generally within the company, but particularly for those people at the bottom. It introduced a very systematic assessment of training needs right through the enterprise, and in that sense it worked. But only about 30% of the labour force covered by that. The government intervened in the market only through unemployment schemes, by facilitating the flow of people back into the labour market through government retraining programmes.

Research had also shown that there had been a substantial upskilling in the UK labour force over the last 10 years. Most of this was accounted for by new Information technology (IT) skills, which showed that the market appeared to have worked. In the Tiger economies, they could enhance the skills base by cranking up the education and training system, or they could increase the supply through vocational and technical education. They had increased the qualification levels of the learners coming out substantially over the years. The big problem was to hold down the demand rather than creating the demand. Singapore, for example, planned on having 60% of the learners in higher education in the next few years, which was quite realistic because of the tremendous pressure from parents for education for their children. In South Korea, the government relied largely on the Chaebols to upskill the labour force, because these were massive organisations, modelled on the Japanese, that offered lifetime employment. The employers could capture all the returns to investment in training and so there had been quite a significant upskilling in South Korean Chaebols. The only problem was that people outside those large organisations were missing out. As a result, there had been a kind of bifurcation of skills whereby the process of upskilling was happening very well for the Chaebols, but the SMEs had no support, could not offer long-term careers and there was no reason for them to invest in training. The government had tried to use public training institutes funded by a levy, but that had not worked. They had tried adopting the German dual system, but that had not worked either and, more recently, they had introduced a new form of tax on all companies to have another crack at a levy system.

In Singapore, there was a totally different problem because the SMEs were not as susceptible to government pressure as were the Chaebols. So other ways had to be found to get employers to upskill their labour force. First of all, government lowered training costs by providing massive subsidies, up to 80%-90%, for training within organisations. It introduced a series of training courses, which were delivered to employers. Initially, those employers who were not doing much training at all were targeted. They were provided with consultative advice on how to establish training needs, how to conduct training needs analysis, and how to examine training in a systematic manner. Once that had been done, it was decided that, if the labour force was to compete in leading-edge markets, on-the-job training had to be improved with the help of trainers from Japan. The Japanese system of on-the-job training was generally regarded as the best, and they tried to replicate that in Singaporean companies. It failed badly to begin with, but instead of discarding it, they had another crack at it, and they had now developed a good system of on-the-job training. They had done this by getting the employers to buy into the need to upskill in targeted industries regarded as key to the future of Singapore. Extensive state funding was provided and a much more systematic and formal system was developed than in the Japanese system because of the lower levels of education in the Singaporean labour force. Once a major employer had adopted it, sent a substantial number of people through it, and it had been seen to be effective, then the other employers started to buy in. This resulted in training cascading down within each industry.

The governments were now trying to influence employers' demand, and help them upskill, through a programme called the "Work Redesign Programme". This aimed to generate a learning culture in the work place, and the talk was not about training at all anymore, but about work redesign and improving productivity. A series of consultants, which were 80% subsidised, were going into companies to look at the way in which the work flow was designed. They were introducing high performance working practices into companies, which themselves generated the need for problem-solving skills, team working skills and communication skills.

The idea was that they would generate a culture of learning and the employees would come out wanting to improve their skills. When it came to individuals, there was the problem of older workers with primary education, or even less than primary education, who had to be upgraded to the level required by a modern company competing in world markets. They did that through a series of modular, bite-size programmes covering, for example, basic education and skills training to get people up to secondary education level. The programmes were delivered in the workplace, very heavily subsidised and had proved quite effective. They still had problems, Singapore still had 50% of the population in semi-skilled and non-skilled jobs.

When it came to rewarding the acquisition of skills, all the government did in the US and the UK was to remove barriers to the operation of the labour market. Britain used to have a real problem with apprenticeship training, which was very expensive. Employers therefore did very little about this because they were carrying all the costs. The Tory government stepped in to partly destroy the power of the unions and to give employers a grant if they could lower their wages to below a certain level to young people entering the labour market for the first time.

The problem in the UK was the low-skills equilibrium by which many employers operated at the bottom end of the market. They were competing by price, using relatively low-skilled and low cost labour and they did not have any incentive to invest in training. From the individual's point of view, if most of the jobs that were available were low skilled, then there was not much point in investing in training. This resulted in a kind of equilibrium in which both sides were quite happy to see this low skills situation continue. The UK did have growing high value-added industries and employment, but it was also growing part-time, semi-skilled, unskilled labour in the service sector at the same time.

That was exactly the same problem that the Tiger economies faced in the 1970s when they had to move upmarket into high value-added forms of production. There tended to be an assumption that somehow the market itself would deliver and, once there was a tight labour market, the employers would start to bid up the price of labour. Wages would start to rise, there would be an incentive then for skills levels to improve and to invest in high value-added forms of production - all because of the market. But this was never the case in the three Tiger economies. At the end of the 1970s, they were faced with a real problem. Wages were rising, there was increased competition for low skilled products from Malaysia, Indonesia and China, and the government had to make choices. It had to keep wages down if it was to continue with its existing strategy and for that it might have had to use force. If one had full employment it was very difficult because there were tremendous pressures in the market to push wages up.

But if they did not do that, then they had to start creating jobs that were high value added that would enable them to continue increasing wages over a period of time. Certainly, Singapore started by trying to repress labour and keep the wages down, but it realised that would not work. Then it realised that maybe the government should encourage this movement of the economy towards higher value-added production. So it did it, but it interfered in the market and it changed the incentive structure within the market.

It increased the costs of unskilled labour in one blow by introducing a levy on low-paid labour. Anybody who employed a person and paid them less than Sing $750 a month, had to pay a levy of about 1% or 2% to the government. That money was then used to upgrade the labour force. The government also took the lid off the unions and told them to push for higher wages, which the unions did and that was a bit of a mess, because they overdid it. They over-ate the pudding, so to speak, and had to pull back a bit, but they were pushing up the price of labour quite directly.

Finally, government helped change the structure of demand. The EDB would only accept incoming capital from those companies that could prove that they were increasing the level of skills in the labour force, and that they were going to higher value-added forms of production. So the government was acting on a number of different fronts using all the levers that it had to literally push the economy in the direction of higher value-added forms of production. A similar process was operated in South Korea and Taiwan.

CONCLUSION

So, the market worked well where the pace of change was relatively slow and the economy had a long period of time to adjust. But what the Tigers had shown was that, if you wanted to speed up the process of change, you should not just rely on the economy per se, but should speed up the process of skills formation. They experimented with ways in which that process could be speeded up.

South Africa was unique in terms of its internal problems in the past and conditions that faced it now. It had higher labour costs than many developing countries and the room for manoeuvre that the government perceived itself as having in the global economy was very restricted.

That was not the case with the Tiger economies. They had much more room for manoeuvre. Of course, one could not just take policies from one country and implement them in another. The only time when that had been successful was where the government and the training authorities had really been ready to experiment and bring the employers on board. But, in general, there was now a much broader range of options to choose from than was available when the Tigers first started in the 1950s.

2. A BASELINE STUDY OF INDUSTRIAL TRAINING IN SOUTH AFRICA 2000

Presentation by Andre Kraak, Human Sciences Research Council director for Education and Training, and Andre Patrerson

The presenters had done work for the European Union-funded Skills Development Programme of the Department of Labour. It was aimed at measuring a baseline prior to the significant changes that had already started taking place in the skills environment.

The private sector in education and training was substantially different to what it had been in 1993. There was now a huge private education provision sector, and the role that the state could play was being debated with a lot of intensity.

South Africa basically had a low-skill tradition and many of the characteristics of the UK model applied here, although they had been racially skewed over the decades. The rate of training, if measured against the economically employed population, was under 2% with apprenticeships playing a major role and peaking in 1986 at just over 700 000. The former government then started the training of unemployed workers and the programme had shrunk since then.

It had been found that the business cycle influenced training output quite considerably, particularly apprenticeship. Fully qualified artisans had come onto the market when the mini-boom reached its peak and the economy needed skilled labour. And in a contradictory way, when the recession reached its low point, more artisans were actually graduating. This reflected a short-termism by employers in terms of training. There had been a lot of stops and starts depending on business conditions, and there was no medium-term or long-term investment in training to stabilise those figures.

The study itself had covered a very small sample, broken into two sectors. The first was the formal sector and covered 679 firms which were mostly small firms employing less than 50 people, medium and large firms. The second was the very small and micro sector, but did not really cover survivalist SMEs and concentrated more on the bottom end of the formal sector. In all, 87 firms had been surveyed in this sector. It was found that men dominated employment ratios, women were marginalized, and African employees dominated the lower ranks and were not represented in the higher ranks.

Some of the statistics unearthed might actually be a surprise. One of the frustrations was that there had not been a major study of occupational structures of the current period and comparing it, say, to 20 or 30 years ago, when there was a lot of work on the racial character of occupational structures, its class composition and the political implications thereof. Kraak believed that there were "silent changes" taking place in the occupational structure that were not being measured . Respondents were asked what employers' awareness was of five aspects of government legislation, and the researchers were quite alarmed by the responses. There was a very high degree of familiarity with the Skills Development Act, probably because of the imposition of the skills development levy. Employers were much more aware of the more politicized issue of the Employment Equity Act, and less familiar with the more technical aspects of the new training regime.

In terms of training by race and gender, the responses were very predictable. Training remained highly skewed. Of interest was the fact that 49% of craft workers, or apprentices, were now African, which was an important shift because in the early 1990s, when it was last officially reported, White workers were 70% of apprentices.

The important analytical outcome of all of the data was to determine the training rate. Here, the researchers had many methodological problems, the main one being that they had to eliminate half of their sample because they did not answer to employment by educational level, occupational level, race and gender. A lot of employers essentially said they did not have the time to fill in that level of detail. Of the 380 firms that replied, the number that they said they trained as a ratio of the numbers employed was 44%.

That was fairly high for a country like South Africa. But if one took into account the employers who did not report, who said they did not have figures, or were in fact hiding no-training situations, the bottom end of the continuum would be 16%. The researchers estimated that the training ratio of the low skilled workers was about 20%.

They based this estimate on the fact the word "training" had not been unpacked while the National Qualifications Framework (NQF) allowed employers to exaggerate the amount of training provided. This situation might be different in three to five years' time when one could measure units of training against accredited values etc. But, in the meantime, employers were aggregating every incident of training, whether it was a half-day computer course or whatever. Much of the training was therefore a short-term phenomenon. It was in-house, part-time and very little of it was externally accredited.

The new training framework had particular target groups and the firms were asked whether, in addition to women and African workers, they trained unemployed workers and the disabled. It turned out that, of the 679 firms, only 43 employed previously unemployed workers who had benefited from training accredited by the Department of Labour, which was a 6% participation rate. That was very low. Similarly, only 38 firms that consciously employed or trained disabled people, a participation rate of 5%.

The firms were asked to detail critical skills shortages. Over and over again, they said the key shortages were technical, artisanal and skilled operative. This was interesting for two reasons. The notion of a skills shortage had always been overplayed by employer attitudes, by ideology, but also, in the more recent period, by debates about globalisation, the new economy and the new skills profiles. One tended to talk about the high-skilled end, the problem-solving skills and multi-skilling as if those were the skills that characterised the entire national new economy, and as if technicians, artisans and operative labour were less important in training and education. This was a very flawed way of thinking and ignored the "middle economy" - traditional manufacturing which covered the large bulk of the economically active population and needed technicians, artisans and craft workers.

Employers were also asked which occupational categories were the most difficult to recruit, and most cited technicians and craft workers, for whom they also expected demand to rise. In contrast, employers tended the say that the skills they needed most in their lower-end workers were things like literacy, practical skills, and numeracy.

Firms were also asked what factors they thought would facilitate and/or restrict investment in training, and the first reasons given covered issues such as increasing productivity, strategic priorities and changing technology. International competition was given a middle-level ranking. On what factors restricted their decisions to invest in training, the firms highlighted cost-related factors and government legislation. On training as a percentage of payroll, the ratio worked out at 4.4%, which was more than the current 0.5% skills development levy, which would go up to 1% in 2001.

When it came to the 87 small and micro firms, their awareness of the new skills development regime was very low at 6.7%. Their employment and education profiles were interesting. There were two categories – owner managers and the remaining staff. There was a very male dominated ownership structure, with Coloured and Indian owners being highly represented in the owning category while African workers made up the large majority of workers.

Their educational profile was quite interesting. Of the owner managers of the SMEs, 44% had a higher education qualification, which gave them quite a strong skills base. It was a reasonably literate group with 45.6% having a Std 8 or more, while 10% had less than a Grade 9. Ninety percent of owners had either a higher education or further education qualification, and 46% of all staff had either higher education or further education. Other than on-the-job training, it was not clear who trained the owner-managers even though they trained the employees although there was an extremely low training rate.

Employers said that 67% of their workforce were trained on-the-job with very low numbers actually going through the system of more formalized training. The large bulk of training was provided by owner- managers with very little external agency, public or private, involvement.

On the critical skills needs of the very small and micro companies, the respondents again cited craft workers and technical workers. What was very interesting about the profile of the SME's was that they had a low percentage of technical workers. Their owner-managers called themselves professional managers and only 13% of them thought of themselves as being technical.

DISCUSSION

Ashton was asked what role, if any, foreign direct investment had played in the strategies of the Asian Tigers. Foreign firms could be attracted by prior investments and training schemes which lowered the real cost of labour by raising productivity. But there were also arguments that foreign investors might bring in new approaches to training in a global way, or in a new sector.

He said that in South Korea and Taiwan, foreign direct investment had been tightly controlled by the government in terms of the kind of access it could get. In Singapore, it was welcomed with open arms with government officials even identifying multi-national managers coming through Singapore Airport en route to somewhere else. The officials "sold" investment opportunities in Singapore "very hard". Then, as they started to go upmarket, they tried to entice the companies that would bring in skills.

They were not were particularly interested at that stage in training systems. They just wanted companies that would come in with the knowledge to upgrade the labour force at the technician/scientific level. Then they entered into agreements with them, which included subsidies, and urged the foreign companies to train far more people than they needed so that the country could start to build up a pool of skilled labour. This would attract other multi-nationals and also develop a critical base from which small Singaporean companies could start to develop.

It was pointed out that the ability to pick winners was probably more complex today, given the nature of global markets. Could South Africa, faced with high levels of competition across a range of sectors and products, target certain sectors and have a more focused approach to skills formation?

Ashton admitted that this was very difficult, especially since it was unlikely that South Africa would be able to crack down on its unions the way the Tigers had to achieve certain aims. But it would be important to have a well-articulated industrial policy, a sense of which parts of the economy, which types of industry, the country wanted to develop; and then having a ministry at a government level that was capable of ensuring that the skills needs were generated.

The reason this could not happen in the UK was that the Department of Education and Employment and the universities had a high degree of autonomy. The crucial thing was to have an overarching ministry that had the ability to say to the suppliers of education and training: These are what the country needs, this is what you will be measured against in terms of your delivery.

Alan Hirsch of South Africa's Department of Trade & Industry asked about the potential, and the risks, of directing educational resources somewhat more effectively than happened at the moment, and into the kind of disciplines that were most urgently needed.

Ashton said he did not think that there was any great risk in targeting a particular group, but then it was a question of finding the kind of incentives that would deliver people through training courses into specific skills. None of the Tigers had tried to match skills perfectly in that sense.

Dirck Stryker from AIRD, a Boston-based research and consulting firm, asked what the most appropriate level was for guiding training. The advantage of the training levies under the old industrial councils had been that these were used by the industrial councils to provide training in those particular sectors. The training decisions were made by people that were more fully immersed in the sectors and could better identify what the particular needs were, than could a more national organisation. But then there was the problem of how to get broad reallocations across sectors where the need might be for more training in IT and less training in some of the older types of industries. He was concerned that firms could claim on the new skills development levy for training that was too informal and could not be classed as real training programmes.

Ashton agreed that it would be better to bring the decisions about the delivery of training down to the sectoral bodies which were close to the industry concerned. In the UK, however, the training boards had lost touch with the employers and lost their support. This kind of system had operated more effectively in

Hong Kong, although the problem there had been that the economy had grown and changed so fast that industrial training boards very quickly became out of date and had to be re-engineered. On the IT question, he said this called for fairly generic skills that were not particularly specific to industry. On-the-job training could be problematic, but it was an important source of skilling. It could be made more systematic and structured, because the problem was that one could learn good skills on the job, but one could learn lousy skills. In the UK, the Institute of Personnel & Development was trying hard to push the UK government into recognising workplace learning as an important source of learning.

His research had shown that while most people learned computing skills from a formal training programme, when it came to teamwork, communication and problem-solving skills, these were best learned in the workplace. Hirsch said it was hoped that the new Sector Education and Training Authorities (Setas) in South Africa would provide sector-specific training in a much more targeted way than the old industrial boards with the help of the new skills levy. Setas would probably also be put in place to provide very innovative training for SMMEs and for workers who were ignored. These were, however, new institutions that had replaced the last vestiges of the apartheid labour law period and might take some time to settle down.

On the recruitment of foreign skills, Ashton said this had worked well for the Singaporeans, even though they had not done it on a large scale. They had targeted areas of skills shortages which they knew that, even with the best will in the world, they could not actually deliver on time. Internationally, with the growth of the new economy and the shortage of IT skills, many governments were now starting to rethink their immigration policies. Instead of being rigid, they were considering opening up to bring in highly skilled people from, say, India, who were good at computer programming etc.

The International Labour Organisation (ILO) had estimated that the total output from the Indian system was about 90 000 programmers a year while the total demand from America, Germany and the UK was something like 250 000. There was no way, however, that relaxed immigration policies alone could deal with the problem while it could also create internal political tensions.

Questions were asked about where South Africa should be focusing its educational efforts to be most effective - pre-school, primary, secondary, tertiary, or industrial training? Should it focus on broadening the educational system, or accept that the attack on unemployment was a step-by-step process and could only improve unevenly?

A recent report had suggested that the rationalisation of the tertiary education system should include the incorporation of many of the technicons into universities to rationalise management systems particularly. But the technicons were an incredibly valuable source of technical skills and it could be quite a damaging step to homogenise tertiary education into a university model.

Ashton said the UK had homogenised its education system and efforts were now being made to break it up again because the Polytechnics had lost their specific focus, which was delivering highly qualified technical scientific expertise. The Singaporeans had never gone down that road. There was a good case for differentiating the output of higher education so that it could deliver the appropriate professional and technical skills. It was important not to allow the institutions that were good at that to be sidetracked into trying to compete with traditional university institutions through their research etc.

To deliver basic skills was not expensive. One option would be to ensure that the vast majority of the population come out with very basic skills, because that made them employable for inward investment and it also provided the basis on which one could build further skills. It was pointed out that about 70% of the output of South African universities was professional workers such as engineers, architects, lawyers and the like. So the notion that higher education was more focused on research was not really true across the board. What would be interesting, however, would be to see what happened to research in the future as the focus shifted to more professional and technical skills. Kraak said the problem in South Africa was that although some people had 10 to 12 years of basic education, apartheid's legacy had ensured that it was a very bad education and employers wanted something completely different. Ashton said that research in Canada had shown that it was not cost-effective for SMEs to use training courses and that they needed incentives to train their staff. Cyprus, for example, had used a levy system to send consultants into SMEs at a heavily subsidised rate to improve the general delivery of training within the SMEs. That seemed to have worked with small organisations doing a lot of training even though they did not have any training staff or dedicated resources.

ECONOMIC MOBILITY IN SOUTH AFRICA

WHICH AFRICAN WORKERS HAVE GOTTEN AHEAD AND BY HOW MUCH? THE STORY OF KWAZULU-NATAL, SOUTH AFRICA, 1993-1998

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LABOUR MARKET DYNAMICS IN SOUTH AFRICA; EVIDENCE FROM KWAZULU-NATAL PROVINCE

Malcolm Keswell, Department of Economics, University of Massachusetts, Amherst.

These papers were based on work done as part of the KwaZulu-Natal Income Dynamics Study (KIDS) for Africans, which had been funded by USAID and Robert Nathan Associates. The aim had been to provide a detailed look at earnings dynamics in 1993 and 1998 in the province and to determine which Africans had improved their real labour market earnings and which had fallen behind against the background of a formal sector that had been absorbing less and less of the labour market.

Under examination had been the informal sector in terms of casual employment, day wage labour and non-professional self-employment. Cichello's team looked at those people who were available to work. This included people who were actually employed, people who were searching and those who said that they were not searching because there were no jobs. In doing this, many zero earners were included in the study. Because what was wanted was an inclusive picture of what was happening in KwaZulu-Natal, the team did not include earnings dynamics generated by demographical changes, people retiring or new entrants.

The prime age work force of 25 to 54 year olds was targeted, of which 15% were not available for work in 1993 and 1998 and were therefore excluded. These people included housewives, students, or those who for some other reason had chosen not to participate in the labour market. South Africa's massive unemployment was highlighted by the fact that 21% of the people seen in 1993 and 1998 were unemployed or "not employed", as insisted on by some at the forum during many lengthy debates. Surprisingly, 29% were employed in one period but not employed in the other, which indicated some labour market volatility.

Keswell said he had looked specifically at individuals who reported incomes for both points in time (1993 and 1998) and changes in their labour market status. He had defined the unemployed as those who said they were unemployed but he had also included people who were unemployed but were not looking for work because they said that there was no work available, or they thought there was no work available.

Cichello said the panel data sets used revealed some surprising results. One of these was that those who had started out well in 1993 with the highest earnings and regular employment, had ended up in 1998 with real earnings losses. On the other hand, those who had started out poorly, unemployed and with the lowest earnings levels, had seen the greatest gains.

Another key point was that those who had been union members had not necessarily done well, but they had done better than others who had started out as regular employees.

Using the median approach on the data, it was found that there had been no change at all, indicating a stagnation in earnings. On the other hand, an examination of average earnings indicated strong growth of

7% a year. In both periods, 27% experienced no change in real earnings, 32% experienced real earnings losses while 42% had an increase in real earnings. The winners gained more on average (R705) than the losers lost (R490). A simple decomposition of real earnings indicated that 58% of the growth in average earnings was due to the fact that the winners gained more than the losers lost, and 42% of the growth in real earnings was due to the fact that more people gained than lost.

Another way to compare the changes in earnings over time was to examine the number of "socially acceptable" outcomes produced via labour market transactions with reference to transitions across a low-earnings line. For 1993, this line was determined to have been R560 a month and was applied again to 1998 real earnings to determine how much above or below the line individuals were, and what their transition had been.

From these the team determined the "escape rate", or the probability that a worker had moved out of low earner status by 1998 after having been a low earner in 1993. There was also a "risk rate" indicating a worker falling into a lower earner status in 1998 after having been a medium-to-high earner in 1993. They came up with an "escape rate" of 20% and a "risk rate" of 36%. The good news was that people could move up. The bad news was that there were plenty of people moving down as well.

The team then examined the variability of earnings changes. It chose the low earner line as a way to standardise the changes. The 1993 low earner line of R560 was well above the average earnings of the available workforce at R397, but well below the average earnings among workers at R698. It was found that a quarter of the available workforce experienced earnings changes greater than the low earnings line while 41% experienced changes at least half that amount and 12% of the population experienced changes twice the size of the low earnings line.

All of these facts presented very strong evidence that the earnings experience of Africans in KwaZulu-Natal had been volatile, with extreme changes in earnings a common feature of the labour market. On average, earnings rose, both because there were more winners than losers and because the average gains for the winners were higher than the average losses for the losers.

But which Africans were getting ahead? When examining some averages, it was found that those who were zero earners in 1993 experienced the largest positive growth in earnings. Those who started off as the most well off, experienced substantial negative changes in real earnings. Similarly, if one started in regular employment, one saw real earnings declines and there was considerable movement on average in a positive direction for those who were not working.

Union members experienced positive earnings changes, whereas regular employees experienced negative changes in earnings. Union members were able to withstand some of the negative influences that the other regular employees felt.

The only demographic characteristics that gave statistically significant differentials in average earnings changes were urban residency and the 25 to 34-year-old age group, both of which were associated with higher average real earnings changes. Post-secondary educated workers had a significantly lower average change in earnings than their less educated counterparts, all of whom were statistically indistinguishable in terms of earnings changes.

On the whole, the univariate analysis presented a picture of a labour market in which the most advantaged lost ground whilst the least advantaged gained. Those in the best initial positions - the highest earners, regular employees, those in skilled and semi-skilled occupations, government and parastatal employees and the best educated - all had average real earnings declines, while those in the worst initial positions gained the most. This stood in stark contrast to the hypothesis of cumulative advantage.

Next, the team looked at the probability of leaving or entering low earner status. Not surprisingly, those people who were near the low earnings line in 1993 were more likely to cross that line because they did not need as large a change in earnings, but some facts that emerged were surprising. Those who were zero earners, had a 17% escape rate from low earner status. On the other hand, of those who were earning two times the low earnings line in 1993, 27% were below the low earnings line in 1998.

The team also included a couple of demographic characteristics that were particularly interesting. Living in an urban area helped in terms of escape rates and it also helped to prevent falling back into low earner status. The age variable showed that the young had higher escape rates, which was not totally surprising, while older people between 45 and 54 years had extremely high-risk rates.

On education, it was found that those with no education had extremely low escape rates while the educated found it easier to escape poverty. Even those who were highly educated had fairly high risk rates, although once they got to post secondary education there was some evidence that they might be able to protect themselves.

The team also did a multivariate analysis of earnings changes and it was clear that there were higher escape rates if one lived in an urban area, were male and head of a household. Education also helped one to escape poverty, but it did nothing in terms of risk and did not prevent one from falling back into lower earnings status.

Keswell said his main findings had been that females experienced a 61% increase in their transition probability from self-employment to being "out of the labour force" while race appeared to be insignificant in predicting transitions out of unemployment and into employment, but was significant in predicting job losses. In short, it appeared that being an African had become unimportant for getting a new job, but was still important for losing one.

Belonging to a revolving credit association (stokvel) increased one's chances of finding a new job by 45% because of the ability to finance time spent searching for jobs, although the fact that it also gave one access to a broader network of people who could help one find jobs was also probably important.

Years of experience was also important for finding a new job if one had been unemployed in 1993, but for new entrants into the labour force, education replaced experience. An additional year of education was important for remaining employed and increased one's chances of moving up the earnings distribution by 5%.

Special attention had been paid to the positive or negative "shocks" covered by the KIDS data. A typical positive shock would have been some sort of windfall that the household gained in the five year period between 1993 and 1998. A negative shock would have been if the individual belonged to a household that had experienced a death or severe crop failure. Individuals who had not experienced a negative shock showed a very strong persistence in the bottom and top tercile, especially in the top tercile at 0.78. For individuals who had experienced a negative shock, this figure dropped to about 0.62. In terms of the African sub-sample, again for individuals who provided information for both points in time, persistence levels resembled very much that of the full sample.

In terms of the Indian sub-sample, there was a much larger persistence level in the top tercile but the sample size was very small. Examining the persistence for those who had been employed, he found that 70% of those who had been employed in 1993 were employed in 1998. Of those, 17% went into unemployment. Of the unemployed, 35% moved into employment. Keswell had been puzzled by the fact that land had been a significant factor in the transition from self-employment to unemployment, increasing the transition probability by 24%. He was not sure whether this meant that self-employed people with land did not use it and would rather be unemployed.

Age seemed to be important for transiting from unemployment to employment but years of education were important for transiting from "out of labour force" (OLF) to employment. Secondary education increased the probability of transiting from OLF into employment. This might suggest that education replaced years of experience although one should not assume that age necessarily represented years of experience.

Keswell had also found that males exhibited much larger degrees of mobility than females, as did people who lived in urban and metropolitan areas. Also, much larger levels of mobility and shocks, negative or positive, unambiguously increased levels of mobility as well.

CONCLUSION

Cichello et al said that previous research had shown that since 1990, the South African labour market had been marked by rising real wages for a shrinking number of workers who were regularly employed. The available evidence also suggested that informal sector employees and non-employees made very little progress, either in terms of moving into more secure employment or into higher earning positions. All this suggested a process of cumulative advantage whereby the winners in the initial period, such as those with high earnings and stable employment, would see greater gains than the rest of the population.

Further analysis had shown that the cumulative advantage hypothesis was wrong and instead there had been much more of an equalising process. Those who had started out the worst in terms of income or employment had gained the most and had seen substantial real earnings growth on average. At the same time, those who had started off with better initial employment and earnings in 1993, experienced negative earnings changes on average.

What had been most surprising had been how many people were getting ahead. It was important to realise that the results held for a particular epoch covering the unwinding of apartheid and there was no way of knowing whether the changes were once-off adjustments to the final scrapping of apartheid, or indicated persistent churning and high turnover in the labour market.

DISCUSSION

Geeta Kingdon of the University of Oxford was the discussant for the first paper and she welcomed it had made prompt use of the 1998 data, which had only been released in April 2000.

On the cumulative advantage hypothesis, she said she did not believe that the cross section data supported this in the first place because cross section evidence in other papers had shown that formal sector earnings had risen from the already relatively high levels of 1993 although formal sector employment had fallen. In other words, the size of the pool of workers getting the high formal sector earnings had fallen. So, while those who had stayed within the formal sector had not exited from that state, they had made gains from their already advantageous initial earnings position. The movers, those who had been in the formal sector in 1993, but who had exited from it by 1998, actually lost because they fell into less advantageous labour market states.

Secondly, unless one analysed both mobility between different labour market states and earnings changes within any given labour market state, one had an incomplete and rather unsatisfactory picture of labour market dynamics. It would have been more illuminating to have made a clear analytical distinction between earnings changes arising from changes of employment status, and earnings changes arising from earnings growth or earnings decline within a given labour market status.

For example, the paper said that those with some education had greater chances of escaping low earner status than persons with no education. This finding could be either because, relative to people who had no education, people with some education had greater chances of exiting from unemployment to employment, or it could be because people with some education experienced a higher rate of earnings growth than people with no education within any given labour market state. Ending the paper without sorting out this relationship between employment dynamics and earnings dynamics, raised lots of questions which the authors could expand on.

Thirdly, the analysis showed that the worst-off gained the most and the worst-off experienced a fall in earnings. The incomes of the lowest earning Africans rose the most and the paper inferred from this that there had been an equalising process taking place in South Africa. This could, however, give a confusing, or even a misleading, impression, because the evidence presented could be compatible with an unchanging Gini co-efficient, or even with an increase in earnings as the Gini was calculated taking the whole distribution of earnings into account.

However, the statement that Africans experienced an equalisation process in their earnings was opposite to the findings of other papers. One, for example, found that within the African group, the income Gini rose. She was not sure whether that paper covered the same period, but there had been an increasing trend. It had been argued that income inequality was driven essentially by earnings inequality, so that it would be very surprising if changes in the income Gini were not matched or were not similar to changes in earnings Gini. This revealed a tension between the apparent conclusion of the paper, that there was an equalising process taking place in South Africa, and the conclusion from other existing studies using cross section data, which implied that within the African group, income in equality had risen. Consequently, the statement that there had been an equalizing process might be misleading.

It would have added to the interest of the paper to have provided explanations for the dramatic statement that earnings growth in South Africa had been a huge 7% per annum in real terms over this period. What factors had been behind this very rapid growth? It might have had something to do with the fact that labour legislation had extended protection to previously non-protected groups, such as agricultural or domestic workers. Similarly, racial employment audits that had been legislated might also explain the rise, but these changes had come into effect perhaps in 1998 or later, so could hardly be seen as the factors explaining the very rapid growth.

The team's data showed that earnings growth had been highest for the young and it would have been useful to state that this pattern was explained by the concave shape of the age-earnings profile, the fact that earnings rose faster for people when they were younger.

In open discussion, it was pointed out that the measures of income in both years of earnings were measured with substantial amounts of errors in measurement, which could systematically overstate the amount of mobility. The fact that there might be an equalising process at work did not necessarily mean that this process would produce a more equal distribution of earnings.

Cichello said using the term: "equalising process" had been used to indicate a longer-term income than just what could be observed in a cross section. It had been found that those who had started out ahead were moving down. Those who started out behind were moving up and so there would be less inequality of the incomes averaged in the two periods.

DISCUSSION:

Jeremy Wakeford of the University of Cape Town was the discussant for the Keswell paper and said it had highlighted the low wage, low skill trap which seemed to indicate that a lack of investment in education was important in keeping low wage earners in that state.

It might have been useful to make a clear distinction between earnings mobility and employment mobility to divide the paper between a concentration on wages and employment. He had also been puzzled by the overweight variable and what advantages this posed in the labour market. Keswell said he had been interested in getting a neutral argument in terms of the ability to access employment and the ability to keep employment. So the basis for measuring this, and there was a malnourished variable as well, was the body mass index, weight to height squared and not the other way round. Wakeford said that a lot of work using this data set and household surveys could, in extreme cases, become obsolete if account was not taken of HIV/AIDS.

Geeta Kingdon of Oxford University said Keswell's paper had been very interesting, in particular, well a lot of things are very interesting. It had in particular been very striking that of the 52% of people who were unemployed in 1993, 52% were still unemployed in 1998. In other words, the uncompleted duration of unemployment for 52% of all the unemployed was five years, which was absolutely dramatic. This, of course, assumed that these people did not in the interim move away from unemployment and then go back into unemployment. Ideally what one would have liked was data which was longitudinal in nature every year, which unfortunately was not available.

She was quite worried about the meaning of the stokvel variable, what it really meant and where it was concentrated. Was there a high correlation between stokvel membership and education? What percentage of the unemployed in 1993 were members of the stokvel? When did they become members, could it be that they became members after becoming employed in which case the causation runs from becoming employed first to having enough resources to
join a credit union.

WAGE PREMIA AND WAGE DIFFERENTIALS IN THE SOUTH AFRICAN LABOUR MARKET
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Studies of labour demand patterns in South Africa had indicated clear patterns of preference amongst firms. The demand for skilled and highly skilled workers had increased dramatically over the last few decades and this had been matched by an almost equal decline in the demand for unskilled workers.

These studies suffered, however, from a key drawback in that they failed to take wages into account in their analyses. The main reason for this had been the lack of adequate and up-to-date data, which also affected the preparation of this paper with the author having to rely largely on the 1995 October Household Survey.

When considering the role of wages in a skills constrained, yet high skilled labour growth economy, such as South Africa's, some basic (if imperfect) data should be considered. The median wage for the economy was about R1 400 a month. White median wages at R4 000 a month were the highest amongst the race groups while that of male workers (R1 555) was higher than that of females (R1 200). The median wage of Africans and Coloureds were essentially the same at R1 083 and R1 082 respectively. While the wage for Indians at R2 310 was distinctly above that of Coloureds and Africans, it was still only about half of the White wage.

The median wage for White females was R2 600 and for Asian females R1 600, both of which were higher than the medians for African and Coloured males. This suggested that while the race-wage gap was still very strong, the gender-wage difference was not as stark.

Higher education levels were associated with higher wages. Even though individuals with tertiary degrees earned the most (R3 500), their median wage was still below that paid to White workers. This would suggest that race, together with education, was still an important predictor of earnings. Although education levels segmented the labour market quite clearly, individuals with matric or a degree earned significantly more than those with Standard 9 qualification or less. While the matric median wage was close to 70% of the median degree wage, the median income for those with less than a matric fell by 35 percentage points relative to the highest earner. What was evident was a different labour force attached to those with incomplete secondary education compared to those workers with primary schooling. While incomplete secondary education would yield a median wage that was 36% of the highest median, this differential increased dramatically when individuals had primary schooling or less. There was no significant difference in the median wage for the latter two education categories.

This indicated that there were three distinct wage segments in the labour market - workers with matric or more, those who had some secondary education, and those who had primary schooling or no education.

Labour demand trends between 1970 and 1995 mirrored these three levels, with the demand highest for those with a matric or tertiary education. Urban wages were the highest, followed by peri-urban and then rural wages. The median rural wage was R667 a month, which was about 37% of the urban median income.

In the nine main sectors of the economy, the utilities sector (electricity, gas and water) paid the highest median wage of R2 512 while financial and business services and community and social services paid the same median of R2 500. The lowest paying sector, by quite a large margin, was agriculture at R436, followed by construction (R1 212) and wholesale and retail (R1 346). Mining and manufacturing each had a R1 500 median wage. The difference between the median wages of the two primary sectors of agriculture and mining was largely due to the strong unionisation of mining.

While the two primary sectors were relatively low paying, White workers in these sectors had the highest median wage across all sectors for all race groups. The wages of Africans and Coloureds in all sectors were very similar while the sector differentiation for Asians and Whites was smaller. The community services sector reflected mainly public sector employees and reinforced the notion that the sector was the largest employer as well as being a relatively high-wage employer.

In terms of occupations, managers earned the most followed by professionals and skilled agricultural workers. The lowest earners were domestic workers, followed by farm workers and then labourers in the mining industry. There was a strong race differentiation in the wages for the various occupations with African workers being paid significantly less than their White counterparts. The gap was largest among agricultural labourers, where Whites made up less than 2% of the number of workers.

For the semi-skilled and skilled occupations, the median wage differential between Africans and Whites remained. African employees ranged from being 35% of professionals to being 76% of machine operators. But while an African professional earned a median monthly wage of R2 646, a White professional earned twice as much at R7 500 a month.

A closer examination revealed that a skilled African worker with a tertiary education earned 16% more from an additional year of education compared to a return of 4% for those with primary education or less. For White skilled workers, the rate of return to education was only affected once they attained tertiary levels of education. The rate of return to tertiary education was 26%. It was therefore clear that the benefits of education to African and White skilled workers were different.

White skilled workers appeared to be concentrated at the top-end of the education spectrum, while African skilled workers were distributed more evenly across the education levels. While at least 36% of all white skilled workers had at least a matric, the figure for Africans was 21%. It was possible that the inclusion of informal sector operators as managers biased the education levels of Africans downwards, although their sample size was small enough to make little substantial difference to the final results.

This suggested that the first reason for the wage differentiation between African and White skilled workers was the higher absolute levels of education among White skilled workers compared to skilled African workers.

The rates of return on the tertiary education variable were also higher for Whites than for Africans. While Whites could expect a 26% return on each additional year of tertiary education, Africans could expect only 16%. It was possible that this was due to degrees from historically white universities being seen as being of a higher quality than those from historically black universities. In addition, White students were getting degrees in computer or engineering related degrees, learning skills which were in high demand, while Africans were getting degrees which were less in demand and which therefore attracted a lower premium in terms of salaries. This was borne out by the fact that African employees were mainly represented in teaching and nursing occupations while Whites were mainly found in managerial, service professional and scientific professional occupations.

For African skilled workers, it was only those in the transport and finance sectors who were likely to earn more than those in agriculture. For skilled Whites, on the other hand, every sector barring utilities was important. This suggested that skilled White workers were well distributed across all non-agricultural sectors in the economy, and at high enough wage levels, to ensure that their earnings would be increased by being in that sector. Whites also earned more that Africans for each additional year of experience they had, tended to be on average older than African workers and earned more for additional hours worked. Being a skilled female worker reduced wages earned but, interestingly, while being an African female reduced wages by about 15.1%, the figures for Whites was more than three times as large at 49%.

Examining the urban-rural split, it was found that being in an urban area would increase the earnings of African semiskilled workers by about 2.8% while for Whites the effect of location was insignificant. This might partly explain why Whites, being predominantly in urban areas, were likely to earn more than African workers. Among the semi-skilled, 63% of Africans were in urban areas while 93% of Whites worked in urban areas.

The education levels of African workers was lower than that of their White counterparts with 23% of semi-skilled Africans having only primary schools while less than 1% of Whites fell in this category. For each added year of secondary education, wages for semi-skilled Africans increased by 12.8% while for whites they increased by 13.7%. Of semi-skilled Africans, 21.2% had a matric compared to 54% of Whites, indicating that the relatively higher qualifications among secondary school Whites accounted for education's contribution to wage differentials. There might also be actual and perceived quality differences in education for the two different groups that accounted for wage differences.

The effect of union membership on wages showed that while wages for unionised Africans rose by 18%, that of Whites rose by about 15%. Union membership therefore marginally reduced the wage gap between the races. Further investigation revealed that the degree of inequality in wages was greatest among African workers, followed by Asian workers, indicating greater wage compression among Coloured and African workers. The premium for male wage earners at the top-end of the scale was larger than for female employees, with greater wage compression in lower levels. There was greater inequality between males and females in all wage groups with the
high earners among males at the top-end of the distribution chain driving overall gender inequality.

In terms of sectors, the highest levels of wage inequality were found in the financial services sector, followed by electricity and construction. The lowest levels of inequality were in manufacturing, community services and agriculture. There was a premium for highly skilled workers in most sectors except agriculture, where the top-end differential was less than the bottom-half differential. Higher unionisation rates, and the fact that urban labour markets dominated the other sectors, ensured that the inequality in the bottom half of the distribution chain was not as large for non-agricultural sectors.

Sectors requiring high levels of skills such as financial services and electricity rewarded top-end employees far more than skilled workers in other sectors. This reflected the extreme shortages of these kinds of skills while agriculture and community services, for example, did not experience the same supply shortages and did not offer the same wage premia.

An examination of 10 manufacturing sub-sectors showed that the highest wage differentials were to be found in the capital intensive radio, television and communications, and chemical and petroleum industries where capital had to be augmented with highly skilled workers. In contrast, labour intensive industries such as food, beverages and tobacco, and textiles, clothing and leather, had the lowest wage differentials

The data suggested that within the manufacturing industry, wage differentials and wage premia were linked to technology mixes within each of the sub-sectors. Capital-intensive industries engendered a demand for high-end workers with very specific skills. The shortage of these skilled workers in turn resulted in high wage premia, so ensuring relatively higher levels of wage inequality within these industries. In contrast, labour-intensive industries yielded a lower demand for high-end workers and perhaps also needed more general skills at the top-end. Given the fact that the shortages of these types of worker was not as significant, wage premia were lower, leading to a more truncated wage distribution. Ultimately then, technology choices within the sector were inextricably linked to the wage inequality outcomes observed in each of these sectoral labour markets.

An examination of eight sub-sectors in the financial services sector indicated that wage differentials were greatest for the research and development and computer and related activities industries, which required highly specialised skills and attracted large wage premia. The lowest level of wage inequality was for the renting of machinery and equipment, which did not need specialised skills.

POLICY IMPLICATIONS AND CONCLUSIONS

This study had important policy implications in four areas of labour market policy - skills development, employment equity, the notion of an incomes policy and the long-debated issue of the wage-employment trade-off. It was clear that because of a severe skills shortage, skilled labour was being paid a premium. Skills development through the various mechanisms provided by the Skills Development Act was therefore vitally important.

There was concern, however, that there appeared to be little dialogue between the departments of education and labour. The very fact that tertiary degrees were so differently rewarded in the labour market had immediate policy implications for how the education department needed to conceive of its higher education interventions.

The Employment Equity Commission (EEC) established under the Employment Equity Act had said it wanted to examine wage differences and wage differentials more closely with a view to promoting greater equity in the workplace. The evidence suggested that a simplistic examination would be foolhardy. Wage differentials were a function of supply shortages of highly skilled employees. They might also reflect differing human capital accumulation of individuals, with the contrasts extremely nuanced in the case of degreed workers. Furthermore, race, gender education, sector and location all combined to form a fairly intricately constructed distribution of wages in the labour market.

For the EEC to legislate a reduction in wage differences and inequality without recourse to all these considerations would be to seriously underestimate the nature and extent of the problem. The current indication was that this blunt instrument was being used as a guide to reducing wage inequality, which could prove to be both extremely disruptive to incentives in the labour market as well as resulting in highly inefficient outcomes.

The idea behind a national incomes and employment accord was that government, business and labour should together attempt to determine a common agenda on employment creation and wage growth. The latter implied that unions would agree, in return for something tangible from government and business, to keep the growth of real wages in check. Any policy discussion around the setting of wages and their growth over time had to take account of the fact that the wage bill was composed not only of the earnings of unionised unskilled workers, but also of high-end employees whose returns reflected significant premia because of skills shortages.

A debate on the relationship between wages and employment had to take place in the context of the wage bill as a whole. For example, it would be useful to assess the growth of the wage bill over time because of the shortage of top-end workers, and to determine which skills categories had been driving the growth in the wage bill. This would make it possible to link wage hikes and the consequences for employment according to skills levels. It might be possible, for example, that a growth in wage rates of skilled individuals was the primary cause for higher labour costs, resulting in job losses. A rise in labour costs should be carefully apportioned between skilled and unskilled workers to give a more complete analysis of the factors driving growth in the wage bill and what this had meant for employment levels.

DISCUSSION

The discussant was Dipak Mazumdar of the University of Toronto, who said the findings on the higher returns to tertiary education for Whites was very important because it reversed the results from previous work and was also contrary to most economists' predictions that the return to tertiary education would be higher for Africans because of the supply constraint. Bhorat had ascribed this to the fact that he had considered the skilled and the semi-skilled occupations separately in the earnings function analysis. But Mazumdar had found it strange that primary and non-standard 5 and standard 6 to 10 Africans had been included in the category of tertiary education while Whites had not been included. This might have been due to mis-reporting although two alternative explanations could be the low returns to tertiary education for Africans because of variable quality of education or that there was occupational segregation in a sense that skilled professionals Africans were concentrated in certain occupations which were paid less.

He was also curious why just three education groups had been included. A major problem about applying the earnings function to South Africa as a whole was the question of spatial and sectoral segregation. In most countries, a distinction was made between rural, urban and metropolitan areas. Income and salary levels were widely different in rural, urban and metropolitan areas, not to mention in the formal and informal sectors.

It was not helpful to say that since there was so much migration, spatial segregation did not exist. In fact, the fact of large migration was evidence of spatial segregation because income levels were not equalised in spite of large migration.

Mazumdar asked whether there was any way to look at the earnings in the formal and informal Work done in a World Bank manufacturing survey of seven African countries, it found that, as in many other developing countries, the largest single contribution to variances in wage inequality was the size of the establishment. This would probably also hold in agriculture and the service sectors.

In the ensuing discussion, it was claimed that it would be gratuitous to call the spread of wages at the top a return to skill. It could instead be a return to non-competitive wage setting practices at the top, but there was no clear evidence on this.

EMPLOYMENT CREATION STRATEGIES

POVERTY ALLEVIATION AND THE PROSPECTS FOR MICRO-ENTERPRISE DEVELOPMENT IN SOUTH AFRICA: LESSONS FROM THE SUBSISTENCE FISHING INDUSTRY

Reza Daniels, Development Policy Research Unit, University of Cape Town

The fishing industry was one of the few industries in which a survey on micro-enterprise development in South Africa had been undertaken. Daniels said he had relied heavily on the analysis done by the Subsistence Fisheries Task Group of the Department of Environmental Affairs & Tourism, which had profiled 143 subsistence communities along the entire South African coastline.

Fisheries made a small, but significant, contribution to GDP. In 1995, the total commercial catch was approximately 580 000 metric tonnes with a value of about R1.7 billion, or 0.5% of GDP. The commercial sector employed about 27 000 people distributed equally between sea- and shore-based workplaces. Another 60 000 people found employment in related sectors. No details were available on the subsistence sector although it was known to be an important source of income and nutrition to coastal communities.

The sector had a turbulent history. Under apartheid, fishing rights had been taken away from black coastal communities and granted to medium to large-scale corporations. The tendency to favour large-scale industries over smaller firms was consistent with the policy of import substitution but meant that vast quantities of rights were allocated to White enterprises while poor coastal (Coloured and African) communities were criminalised if they tried to fish for commercial or subsistence reasons. In the allocation of rights to the fishing industry, the Chief Directorate: Marine and Coastal Management (CD: MCM) was bound by the biological limits of individual species of fish. Rights were therefore based on the principle of the Maximum Sustainable Yield (MSY), which implied that, in any given year, the total quantity of fish that could be caught should not compromise the ability to harvest the same quantities the following year.

MSY was associated with the concept of a Total Allowable Commercial Catch (TACC) or the total annual allocation of resources (usually in tonnes) that were allocated to commercial enterprises in any one-year. In the past, no allowance had been made for the subsistence sector and the transition to democracy raised the hopes of those in this sector that they would be taken into consideration. However, there had been considerable acrimony over this, not least because the demand for rights far outstripped supply and the lack of knowledge about the nature or definition of subsistence fishing. In 1999, the CD: MCM initiated a far-reaching study into subsistence fishing. Although this had been extensive, there was still very little understanding of how these fishers operated, what they should be allocated and the potential contribution fisheries in general could and could not make to coastal economic development.

Daniels said the aim of his research paper had been to examine the effects on subsistence communities of given financial transfers and to assess whether these transfers could possibly lead to a more sustainable form of income generation in poor communities by encouraging micro-enterprise development.

METHODOLOGY

Daniels said he had used the Foster, Greer & Thorbecke (FGT) Index of Poverty Measures, which firstly established a poverty line at R1 000. He had chosen this line rather than the more widely used R650 because he had been limited in terms of the data to the census categories. He had only been interested in the poor population below the poverty line. The difference between their income and the poverty line represents the poverty gap, which allowed him to understand the level of public expenditure needed to eradicate poverty.

He identified the143 communities within the census but was only able to find 86 because some did not have an actual place name attached to them. So the sample was 86. He then also looked at only the Agriculture, Hunting, Forestry & Fisheries Sector, with a proportion of the unemployed incorporated in that sector, and came out with a total sample size of 5 867.

Some of the unique characteristics of the sample were that, there was a male bias in subsistence fishing communities, and a racial bias in terms of Coloured people representing a greater number of the total population. He then looked at how many people actually were below the poverty line and found that the African and Coloured populations were more impoverished than the others, and that there was a gender bias to this poverty in that women were very much more disadvantaged.

On the poverty gaps, it was calculated that R20.9 million would be needed to alleviate poverty in the sector, although an 8.2% error was introduced because Daniels had to use the October Household Survey since the census was in categories. When it came to fisheries per se, Daniels examined the range of different fish harvested and how they were used/sold. Abalone and West Coast rock lobster, for example, were much higher value species and a lower quantity of those species had to be allocated to the communities than would be the case for lower value fisheries. It was estimated that 16.69% of landed value, and 6.12% of the wholesale process values, of the annual harvest of all fish species would cover the R20.9 million needed to eradicate poverty.

Daniels then examined the impact of resource transfers and ran three simulations involving transfers of R500, R700 and R900 a month. It was found that R700 reduced total poverty by 21.43%, while the impact of R500 was 17.56% and of R900 was 24.56%. It appeared that the Indian population in the sector would benefit the most from all the levels of transfers, eradicating poverty entirely. Coloureds would benefit the most from the R500 and R700 transfers followed by Whites and Africans. This was a surprising trend, suggesting that a greater proportion of Coloureds earned closer to R1 000 than was the case in the White population, although the trend was reversed for the R900 transfer.

It was found that although a greater allocation of resources to subsistence fishing communities would steadily decrease the number of individuals in poverty, it would also increase the inequality levels within the poor population.

The question then was whether such transfers were sustainable or not, or whether they should be allocated on a once-off basis or consistently over a period of time. Because fishing resources could be over-exploited, care had to be taken to ensure this did not happen. An examination of trends showed that while resources of redeye and squid, for example, had both increased dramatically since 1968, resources of abalone and prawns had remained fairly constant while rock lobster resources had continually declined, indicating over-exploitation. Snoek had also been over-exploited until 1988, after which resources had increased. All this gave rise to fairly dramatic fluctuations in annual stock levels, indicating that some species were in a healthy state while others were not. As a result, an over-reliance on some of the more vulnerable species in any efforts to alleviate poverty would backfire while returns from harvesting generally would fluctuate from year to year. It would therefore be impossible for subsistence communities to prosper on fishing alone, and alternatives had to be found to eradicate poverty.

Daniels found sharp regional differences among the communities in the Northern Cape, Western Cape, Eastern Cape and KwaZulu-Natal. As to be expected, the use of nets, traps and lines, which were all very low intensity methods of fishing, varied between the regions according to which fish resources were available. Traps were used to catch crayfish but not abalone, which could be picked by hand while line fish needed fishing lines. The Northern Cape and Western Cape had a far greater proportion of boats than the Eastern Cape and KwaZulu-Natal and of those with boats, most had motors. Income transfers to those with boats would surely benefit them more than those without. This meant that the Western Cape and Northern Cape would benefit disproportionately more than the Eastern Cape and KwaZulu Natal.

Communities in all regions also made tools themselves within a home environment although some bought their tools. There was a greater dependence on homemade tools in the Eastern Cape and KwaZulu-Natal. The percentage of the catch sold was an important indicator of how much of the fish was actually being consumed by people themselves. Although there was not really a regional bias in this, the communities in the Western Cape tended to sell more of their catch.

Market access was measured by whether people sold their fish themselves or sold to a buyer with certain standards. The Western Cape again showed a marked difference with more fish being sold to buyers. Most communities were fairly dependent on local demand within a 20-kilometre radius or less although a few did sell further away. This indicated access to distribution networks or use of a vehicle.

All these facts had to informe a public policy perspective because if 16% of a resource was to be allocated to subsistence fishing, that meant 16% of resources would not be going to commercial fishing. And in this process there would be a value loss because subsistence fishers would obviously never be able to reap the same kinds of value as commercial fishers when they sold that catch as they might not have the right quality or meet other forms of standards. But it was also important to understand that relatively small investments in the sector yielded disproportionately high results because one was dealing with an exceptionally vulnerable population. In the Eastern Cape and KwaZulu-Natal people were more disadvantaged and would require greater effort to link them to other forms of enterprise development, possibly in eco-tourism. But when allocating resources, the linkages to upstream processing activities would be fairly critical. The more subsistence people could link up to processing, the more they can make the transition between informal and formal activities.

The promotion of micro-finance schemes should also be considered to take away the burden of financing the informal sector from the public sector per se and introduce it to a public sector micro-finance agency or other forms of financing.

DISCUSSION

The discussant was Vusi Gumede from the Department of Trade and Industry said He would have liked more detail on the communities surveyed and how the Census 1996 data and the OHS 1995 data were combined.

The issue of micro-finance was important but relatively controversial from DTI's point of view given all the problems experienced in this area. The supposed presence of a large number of women in the sector was queried, but it was pointed out from the floor that when ships were in dock, women were more involved with providing maintenance and support services for the fishing industry. The maintenance and repair of nets, for example, required a sophisticated knitting procedure.

David Evans, a visitor, said it would be interesting to know how subsistence fishers related to the larger, often foreign-owned, ships that employed wage labour. It was agreed that while there had been a great deal of publicity about the complaints about fishing quotas by the subsistence fishing communities, not enough research had been done into what alternatives they faced and how government policy could more broadly help them out of their poverty traps.

INFRASTRUCTURE DELIVERY IN SOUTH AFRICA: MEETING THE OWNERSHIP AND EMPLOYMENT CREATION DEMANDS

Ebrahim-Khalil Hassen, Naledi

This paper was based on initial thinking at Naledi around infrastructure delivery and formed part of a broader research programme looking at how to increase the impact of public spending on poverty. Hassen said government faced acute pressures to deliver infrastructure at scale on the one hand, and, on the other hand, there had been a tightening of government's fiscal policy. It was important to examine how some of these tensions played themselves out at the micro-level. Infrastructure was usually classified as basic needs, water, housing, sanitation, energy and roads.

Since 1994, there had been some fairly significant improvements in infrastructure delivery. According to the Department of Housing, by the end of this financial year, 900 000 houses would have been built, about 73% of people would have access to water while there had been about 1.9 million new connections of electricity since 1994.

However, there were huge backlogs in all of these. For instance, for housing it was 2.9 million units and it was estimated that there were about 200 000 new entrants for low income housing. There were about 11 million people who did not have access to water. A large number of rural and urban communities did not yet have access to electricity.

This immediately posed the question of how much money government was actually putting into infrastructure. It was difficult to get the exact figure, but he had broken down what had been available into two broad categories - personnel expenditure and capital expenditure - and had found that capital investment had been about 6% to 7% of the national Budget and between 7% and 8% in the provinces, which was quite low from the perspective of actually impacting on poverty. The Budget continued to be dominated by personnel expenditure while gross fixed capital formation by public corporations between 1992 and 1999 was higher than that by national government.

Hassen had also looked at maintenance costs and, in particular, the cost of rehabilitating roads. If this was done within the first two to three years, he said, it cost R0.1 million per kilometre. However, after four years, it increased to R1.8 million per kilometre.

The key question, however, was whether it was delivering services enough. Current government policies were based on affordability and there were limited linkages between the standards determined by affordability and attempts to revive local economies.

The municipal infrastructure investment framework provided for basic, intermediate and high levels of service with the aim being to provide a basic level of service to all within ten years. A basic level of service in an urban area would result in a R50 bill at the end of the month which rose to about R163 for a high or a full level of service. The key criticism of this was that providing a basic level of infrastructure meant productive capacities were not increased, particularly within rural areas, because standards were so low.

Norm-based delivery aimed at satisfying basic minimum needs was guided by service standards and aimed for equity across disparate communities. This was usually a top down process in which government got the process rolling and there was a quick rollout of services.

The application-based approach to infrastructure delivery more associated with Public Works Programmes spoke of a more integrated spatial focus around the extension of infrastructure investment. This allowed a shift from a norm-based to a more application-based approach, for more creative thinking about local economic development strategies and about sustainable incomes within rural communities. The latter was easier said than done, however, and there needed to be a greater link to integrated development plans which were essentially local government planning frameworks. In addition, there had to be a capacity to play a facilitation and co-ordination role.

To move beyond the provision of basic needs, one had to look at sustainable livelihoods, which was similar to what the trade unions called the social wage. Essentially, this meant that the investment in infrastructure delivery had to be sustainable. It had been estimated, for example, that about 90% of all water extension projects soon broke down because of affordability.

Then there were spatial choices. Current housing delivery perpetuated urban sprawl which increased travelling costs, reduced the thresholds needed to support economic activity etc. The main reason for this was that the subsidy has declined tremendously in real terms, which pushed developers and government to the peripheries. This was clearly not sustainable from an economic growth perspective or from a perspective of reducing income inequalities.

Government policy on infrastructure could also be improved in terms of the type and quality of the growth path chosen. Use could be made of redistributive tariffs, which were essentially a lifeline tariff after which unit prices were increased progressively over a period time. Pilot projects in Hermanus and Durban indicated that these could be successful.

Underlying all this was the issue of public sector transformation, with government's aim being to make the transport, electricity and other sectors more competitive. However, even private sector research had shown that in the electricity industry, for example, restructuring to establish regional electricity distributors (REDs) was likely to increase tariffs by between 20% and 50% and that the REDs would not be financially sustainable over a ten-year period. It was also likely to lead to job losses.

DISCUSSION

Jeffrey Fine asked what the implications Hassen's work would be for public-private partnerships, either in terms of direct investment delivery and the effects of concessioning water at the municipal level, electricity, roads, courts and airports.

David Evans it was important to link basic needs and infrastructure provision at the municipal level to trade and industrial strategy. It had been calculated, for example, that every 1% cut in the cost of transport out of Africa would increase trade by 2.5%. Alan Hirsch of the Department of Trade and Industry said the whole area needed much more research. On the relationship between industrial policy and infrastructural development, he said there was not a very strong relationship at any macro level.

In a way, there was a kind of economic irrationality in the allocation of resources but it was obviously not a political irrationality. It was important to deal with the politics of the allocation of resources and how to try to shift the allocation of resources towards a more economically irrational allocation of resources within the political society that we had, which was not an easy thing to do. And on the other hand, there was a notion of an integrated rural development strategy about which there had not yet been a very clear rational and sustainable argument that underpinned it. This had to be addressed.

Government itself was trying to deal with this issue in a kind of marginal way. It was about to launch a critical infrastructure programme in which economic infrastructure that is associated with new investments would be subsidised, whether that investment was undertaken by a private company or a local authority or province.

There was a great deal of debate in government at the moment about why more infrastructure investment was not taking place. The Department of Finance had said the funds allocated were not being used and had blamed poor managerial capacity. But provincial or local governments simply said they had no money. It was a real conundrum which someone should investigate, Hassen said it was difficult to reconcile government's overall commitment to bringing fow all sorts of expenditure with the huge needs facing the country and the government's this commitment to accelerated delivery. The introduction of public-private partnerships had been a very top-down process but it was seen as a panacea to solve the fiscal crunch within government. And yet it had been found elsewhere, notably in the US, that they did not work in terms of leveraging finances or extending services. Here, in the Dolphin Coast experience, Hassen had been told that the private company had been able to cherry-pick the richer, white areas for which the local government then provided a subsidy. He had not been able to confirm this.

Johannesburg had moved quite far ahead without trade union involvement. But it faced a major obstacle in terms of the pension fund and the fact that it could not transfer workers because the pension fund would not allow this as the workers would essentially lose their benefits.

Public-private partnerships were also premised on "a very dangerous assumption" that it was good to by-pass the bureaucracy. In some cases, one could perhaps argue that private sector involvement and investment was needed. But when it came to education, health, water etc, these had to be delivered in terms of the public good.

SPATIAL DEVELOPMENT INITIATIVES AND EMPLOYMENT CREATION: WILL THEY WORK?

Cliff Naudè, CSIR and Suzanne McCoskey, US Naval Academy

Spatial Development Initiatives or SDIs were launched in 1995 to generate investment projects in key economic sectors in specific areas of the country with the aim of increasing employment in these sectors and areas.

The SDI process was the first attempt by government, mainly the Department of Trade and Industry (DTI) and the Department of Transport, to implement economic policy. It sought to identify key areas of the country, which could be the focus of economic development, aimed at redressing the imbalances wrought by apartheid. The areas were identified on the strength of core economic activities (along sectoral lines) which characterised the area, and strategies were then devised for these lead sectors. Anchor projects were then identified as key projects which could initiate and sustain the SDIs. More often than not, the SDIs included existing or proposed transport infrastructure and took the form of a development corridor. A key component would the be the active promotion by government of investment by the private sector in the anchor projects in the SDIs.

The different kinds of SDIs covered industry (KwaZulu-Natal, Fish River, Richards bay-Empangeni and Phalaborwa), agri-tourism (Lubombo and Wild Coast) and mixed sectors (Maputo Development Corridor and West Coast Initiative). Other projects still being refined included the Platinum SDI and Industrial Development Zones to support the SDIs (Saldanha, Durban and Richards Bay).

The SDIs mentioned here had identified more than 700 projects worth $32.4 billion and creating 86 000 jobs. These jobs were highly capital intensive and would cost R375 000 each to create.

ECONOMIC THEORY BEHIND SDIs

The "new economic geography" school of economic thought attempted to explain economic development in terms of "history and accident" (political developments), the geographic location of industries relative to their suppliers and markets, advantages accruing from the concentration of industries which perpetuated industrial patterns over time long after the initial rationale for the location had diminished, and identification of a core and periphery of an economy which might change over time. Transport and fixed costs were key determinants of location in most cases.

The notion of the existence of a "core" and a "periphery" in economic development and international trade in the context of globalisation also had to be taken into account. This model used a world consisting of two regions that were principally equal at the starting point. Eventually, once transport costs started coming down, one of those regions ended up specialising in terms of manufacturing activities. The other specialised in agriculture. The end-result was an industrialised core and a de-industrialised periphery. Real wages fell quite substantially over time in the periphery, which, of course, tended to attract industry back to the periphery.

In the case of South Africa, the authors found that the economy had become less reliant on the traditional sectors of agriculture and manufacturing and had become more of a service-based economy.

The authors examined the contribution to GDP by the provinces over time and found that Gauteng was a key contributor but its share had in fact dropped over the last five or six years while the Northern Province, KwaZulu Natal and the Western Cape had all shown increases. All three sat on the country's borders while the Northern Province had benefited from the deregulation of the road freight industry since 1989. Before that, most of the north/south trade that occurred in the Southern African region took place on, or was facilitated by, rail. Since deregulation, more trucks had been moving through the Northern Province to Zimbabwe, through the Beit Bridge border post, whereas previously all of that tonnage would have gone through Botswana by rail.

They also examined employment changes in SDI and non-SDI areas from 1980 to 1996 using magisterial district level data for employment on a nine sector basis and for the periods of change between 1980 and 1991. The current SDI magisterial districts exhibited some level of growth vis-à-vis the non-SDI areas or magisterial districts but this was reversed between 1991 and 1996 with non-SDI areas experiencing growth, whereas the SDI areas were in fact in decline.

The authors noted that in the period running up to, and including, the launch of the first parts of the SDI programme, a couple of sectors such as agriculture, for example, which accounted for 35 000 of the 86 000 jobs or 40% of the total, actually contracted in terms of employment. Likewise, mining, which constituted 4 000 jobs in the SDI programme, also contracted. Manufacturing, which made up 47% of the total of 86 000 jobs, also contracted.

A regression analysis found that if SDIs were to generate employment on the back of existing employment growth and profit from agglomeration effects of various industries, they had to be positioned in the areas of highest economic activity. The regression results seemed to indicate that the SDIs and employment might be linked but there could also be an element of coincidence given that the programme had gradually been extended over time. Employment in 1996 seemed to have been derived from various sectors of the economy to varying degrees. The commercial and retail sector seemed to have been the strongest "driver" of employment. A number of other sectors (agriculture, transport and services) had a lesser influence but were still positive. Manufacturing employment, however, had declined while that in mining was positive but not significantly so.

CONCLUSIONS

The capital required by the potential SDI projects was substantial when measured against their potential job creation at some R400 000. The issue here was whether key projects should be prioritised in terms of their ability to create jobs in the near future.

The bulk of the envisaged SDI projects were focused on the traditional sectors of the economy - agriculture, mining and manufacturing. Globalisation and the "new economy" might dictate that this emphasis be revised to include sectors that were poised for growth - tourism, financial and business services and "hi-tech" manufacturing. The case for this would seem to be even stronger if the hierarchy of development was considered whereby economies become more dependent upon tertiary sectors and less dependent on primary and secondary sectors for economic growth.

It appeared that a gradual widening of the location of SDIs include areas of the country had resulted in an alignment of SDIs with those areas which had experience employment growth between 1980 and 1996. This should ensure that the SDIs were located in areas of economic growth and the core of the economy as opposed to the periphery.

The extent to which government could directly influence the decision to invest could be limited because the final decision was a "firm-level" one. However, government could very well play a useful role indirectly in terms of influencing the structure of the firm's decision through infrastructure provision, reduction of transport costs and enhancement of education levels. For SDIs to be successful, the legal and institutional framework support investment would have to be favourable. An example would be the objective of creating 35 000 jobs in agricultural and related sectors in the context of a land tax and the legal framework pertinent to employment.

DISCUSSION

Alan Hirsch of the Department of Trade and Industry said that this was obviously an important topic for government, given that a lot of resources had been devoted to SDIs and would continue to be in the future, although through different organisational structures.

On capital:labour ratios, he said the data used had been prepared essentially for marketing purposes and some of the figures were patently absurd. For example, for fishing and marine products it was estimated that it cost R1 500 to create a job while in the food and beverages sector, which was well known to be a pretty labour intensive sector, the cost was nearly R3 million per job. There was no scientific basis for this whatsoever.

Beyond that though, one had to ask whether the average of R380 000 per job was expensive. There was no evidence in the paper suggesting what a job should cost. At the same time, this approach looked only at direct employment effects, whereas the fundamental theoretical basis of the argument should be about agglomeration effects.

On sectoral focus, Hirsch said this was quite a complex issue and the most interesting and controversial suggestion coming out of the paper was that the SDI programme had made a mistake in focusing on old economy sectors such as manufacturing, mining and agriculture, at the expense of those sectors which, on the basis of domestic and international trends, had a higher potential to grow. He would qualify this argument by saying that for a couple of those industries, agriculture and mining in particular, the periods examined in terms of their growth were problematic, especially the 1991 to 1996 period. And also for many sectors, especially mining, taking 1980 as a base year for the previous period's analysis was very problematic because of the exceptionally high gold price in that year.

He did not deny that these were not the most dynamic sectors in the South African economy, but they were all undergoing very considerable restructuring. Restructuring in mining meant, to a large extent, moving away from gold mining towards other important minerals and there were quite significant investments being made at the moment. The key mining foci for the SDIs were the North West province, where platinum was obviously a very big product, and the Eastern Mpumalanga and Northern Province areas where there were also very valuable non-gold minerals that had significant investment potential.

Some agricultural sectors were inevitably in secular decline, but there were many very important agricultural sectors, such as fresh fruit and vegetables, for example, where there was considerable potential. Another was the processing of sugar into chemicals.

The new economy sector was still very heavily piggybacked on the backbone of the old economy. It had two dimensions. The one dimension was that it transformed the entire economy in the same way as electricity had in the late 19th century, and as steam power had in the late 18th century. It was an industrial revolution of a similar importance and therefore very much related to the old economy sectors. But it was also a sector in its own right. For example, it was amazing how consumption patterns had shifted away from things like food and furniture towards cell phones, which had troubled many retailers but was a sign of major shifts in the economy.

But what DTI was focusing on with the SDI programme was exploiting the existing comparative advantages and hoping that would give rise to the new economy. R&D in the new economy areas in South Africa were mostly applications to the natural resource sector.

It was no coincidence that SDI had been set up in high growth areas as these areas had been deliberately targeted although political factors had sometimes intervened so that there was at least one SDI in each province. Hirsch agreed with the suggestion that there should be a general system that supported investment as the SDIs on their own were not enough. He expressed concern about some of the methodology and data used especially when it came to calculating the cost of jobs. It was important to differentiate between the SDIs as they were very different. In KwaZulu Natal's greater Durban area and in Wild Coast, for example, the whole nature of the economy and the objectives were fundamentally different and to aggregate as the authors had done in the regression analysis was not appropriate.

Naudè agreed that some of the data still needed a lot of unpacking while there was a clear need for better data. The labour requirement of the new economy was substantially different from that of the sort of smokestack era and would be interesting to explore further.

EMPLOYMENT GROWTH, SMMEs AND LABOUR MARKETS

GROWTH AND EXPORTING OF SMALL AND MEDIUM ENTERPRISES IN SOUTH AFRICA; SOME THOUGHTS ON POLICY AND SCOPE FOR FURTHER RESEARCH

Vusi Gumede, Department of Trade & Industry

Gumede stressed that his paper was very much based on work in progress, but attempted to highlight some critical policy questions for the small and medium enterprise (SME) sector with regards to exports.

The main question raised was the ambiguity of the relationship between the size of an enterprise, its growth, its exporting, the characteristics of the owner or the manager, the location of the enterprise etc.

He had reviewed a number of international and local studies and conducted a survey of enterprises and enterprise service centres, or business service providers, in KwaZulu-Natal. The main shortcoming of the paper was that it was really not based on any concrete theoretical framework of analysis and broadly covered issues with regard to exports, growth and the opinions of firms in KwaZulu-Natal. He had encountered a lack of extensive data, which had made it difficult to analyse the performance of SMEs.

As a starting point, however, he believed that SMEs were playing a significant role in terms of creating employment and in exporting. The agricultural sector's employment appeared to have been dominated by SMEs, especially small enterprises. SME mining employment, on the other hand, was very low but was expected to rise given specific programmes to promote small-scale mining. Total SME manufacturing employment had been growing and now accounted for about half of the jobs.

The share of small enterprises' contribution to total agricultural production had grown from 10% in 1987 to 45% in 1997 while that of medium enterprises had fallen from 38% to 20%. SME contribution to mining output had fallen dramatically while the share of manufacturing output had remained relatively stable at 68%.

SMEs performed well compared to large enterprises when it came to foreign trade, mainly with the EU. Since 1990, exports had been low while imports had been high, resulting in a trade deficit which had widened over time. There might be a good case for promoting small business exports so that it could take up opportunities that large enterprises had, for some reason, failed to explore.

There had been mixed results when it came to research into correlating the size of an enterprise and the behaviour of the enterprise in terms of growth and exporting. Because of the shortage of relevant data, many studies had drawn their analysis from research surveys and case studies. Gumede's own survey had concentrated on Groutville in KwaZulu-Natal (KZN). The response rate by enterprises was 32% and by service providers 70%. The questionnaire covered enterprise profile, owner/manager characteristics, problems of growth and exporting and open-ended questions. According to the service providers questioned, most small firms said that they had less than 10 employees while medium enterprises had up to 20 full-time employees. Smaller firms had a turnover of less than R5 million while the figure for medium enterprises was up to R10 million.

The businesses seemed to be growing either fairly or slowly, with only 14.28% saying that they were not growing. About the same percentage said firms were not exporting while the rest said that small firms had either fair or low exports. Those firms that had been exporting had been doing so for less than five years.

The firms were a combination of retail and manufacturing concerns and ownership by population group was fairly spread through all races. The owners were generally aged between 31 and 40 years and had some post matric education.

Service providers said they believed that demand and good planning were the two most important factors driving small business growth and exports. Lack of information and finance were significant factors constraining exports. They also singled out inflation, interest rates, lack of demand and tax as the most significant external factors constraining the growth of small firms. Internal constraints included poor quality of products, shortages of skills, lack of finance and lack of planning. These constraints also affected exporting. External constraints included exchange rates, lack of markets, lack of government incentives and the rigidity of trade instruments.

The service providers suggested that support institutions and the government should concentrate on capacity building, finance and the provision of information. They believed that there was no co-ordination of small business support by the various institutions involved.

The small businesses surveyed broadly came up with the same points as the service providers. None of the firms had a turnover of more than R5 million while 62.5% had less than 10 employees and the balance more than 50 employees. Of the firms, only 12.5% were exporting while 56.25% had been operating for less than five years and the rest a little less than 10 years.

Small businesses believed that demand for their products was the single most important factor that positively influenced their growth (68.8%) while 37.5% mentioned access to markets and 19% highlighted infrastructure. Among key external factors affecting growth were inflation and interest rates with 87.5% of the firms complaining about high prices. Other constraints included poor product quality, lack of skills and lack of planning. All the firms said finance was a real hindrance to growth while most also complained about the rigidity of trade instruments and the lack of finance and information. They suggested that small business support organizations should focus on training and the provision of finance and information.

In conclusion, Gumede said it was clear that SME research had been constrained by the paucity of good data. In terms of policy, it was clear that the focus should be in targeted specific programmes that helped create an enabling environment, provided finance and information and improved human resources. The focus should be on inflation, interest rates, taxation, training, the provision of relevant incentives, increasing access to markets and finance, and improving the co-ordination between units dealing with small business support. The role of government might be limited in dealing with some unsystematic challenges faced by SMEs and they would have to take absolute responsibility for dealing with the capacity of their workforce, the quality of their products, relevance of information gathered and the need for planning.

In terms of research, more case studies should be encouraged while there was an urgency to unpack the export behaviour of SMEs as opposed to that of large firms. Export processes and factors determining export success/failure should be clarified. There were signs that many small firms might be exporting through intermediaries, indicating a gap in policy support.

DISCUSSION

Harry Zarenda, the discussant, said there was some debate about whether turnover was the correct criteria to use when defining SMEs. Some people preferred to look at the number of employees, initial capital constraints and things like that. The lack of adequate data was a major problem. He had also been concerned to note that since about the early 1980s, output had remained at 10% while employment has grown by 24%. This raised the question of whether this was really a viable export market when employment growth was growing quite substantially but output remained reasonably constant.

He suggested that Gumede should perhaps focus on some firms, on a much more micro level, that were doing particularly well, and on some firms that were not doing particularly well at all. The results could be compared to find out what was going wrong and what was going right. He could also focus on the services sector, particularly given global changes in structures of production and the importance of the emerging burgeoning services sector. It admittedly might not be tradable, but if one was looking at domestic conditions, that might be a sector worth looking at as well as a possible future potential growth sector.

The relationship between SMEs and employment was also problematic and also perhaps called for a much more micro-based study into what type of employment conditions prevailed and what the employment growth potential was of this particular sector.

FAILING OR NOT AIMING TO GROW? MANUFACTURING SMMEs AND THEIR CONTRIBUTION TO EMPLOYMENT GROWTH IN SOUTH AFRICA

Anna Kesper, University of the Witwatersrand

The experience of prospering industrialised countries suggested that the small and medium-sized enterprise (SME) sector was key to local economic development, resolving persistent problems of insufficient employment growth while being highly efficient in flexibly serving increasingly segmented consumer markets.

In South Africa, the debate had centred on small, medium and micro enterprises (SMMEs), which were seen as major contributors to job creation, international competitiveness and economic empowerment. This had justified the introduction of supportive supply-side measures to deal with constraints facing the sector.

Research had, however, revealed a mismatch between theory and reality with the sector being far from homogeneous and only a small segment likely to contribute to employment growth. In fact, many SMMEs allowed for mere survival for those employed in them. In addition, the performance of small business appeared to depend not only on the removal of constraints through supportive public policies and regulations, but also on industrial and organisational structures, the ability of firms to adapt and, above all, on the capabilities and aspirations of the entrepreneurs involved.

SMMEs AS MAJOR EMPLOYMENT CREATORS - EVIDENCE FROM INDUSTRIALISED COUNTRIES

The late 1970s and 1980s saw the re-emergence of the small firm in many industrialised countries. This was mainly due to spectacular cases of large enterprises running into economic difficulties and shedding jobs while small firms were increasingly seen as being able to create most new jobs on the market. However, research had shown that large employment gains occurred in only a few small firms as most small firms started, and remained, small throughout their existence.

THE AFRICAN EXPERIENCE

In Africa, SMMEs had been seen as important because they outnumbered large firms and could absorb labour at a time of shrinking public sectors and private formal sectors coupled with increasing numbers of new labour market entrants. With the shift of industrial policy away from import substitution and attracting foreign capital, SMMEs were also expected to play a role in sustainable endogenous growth and to adopt similar strategies as their counterparts in Western Europe and Japan to cope with global competition in more open and unstable domestic markets.

Research had, however, shown that although informal micro-enterprises made up the majority of small-scale industry in Africa, only about 1% succeeded in graduating to an intermediate size. Virtually all SMMEs operated in conditions of excess supply of relatively unskilled and unorganised labour which allowed them to transmit the burden of unstable markets onto their employees, and to base competition on squeezing labour costs rather than innovation or technical upgrading. Unlike in South Korea, where large firms acted as catalysts of growth in their subcontractors, corporate subcontracting to small and mostly informal firms in Africa was more often than not a means of reducing costs by exploiting labour surplus conditions and circumventing regulations and trade union organisations.

Clusters of sector-specific firms did exist in Africa but their growth experiences varied and differed markedly from other developing country cases. Indeed, strong social ties and networking, reported to be essential for the success of industrial districts in Europe, had ambiguous effects on the growth of firms in Africa. For example, while these ties were supportive among the Igbo in Nigeria, research in Kenya suggested that the successful African entrepreneur had loosened his networks based on kinship and social ties in general. In addition, formal institutions in Africa faced crises of legitimacy and enforcement by not being rooted in local culture and were therefore not conducive to enterprise growth.

Research findings on SMMEs in Africa were diverse, but did show that it could not be enterprise size that determined a firm's potential for success or failure. For example, it was argued that both the social and institutional business environment, as well as the entrepreneur with his/her human capital and aspirations, affected small business performance more. The predominance of SMMEs, however, did indicate that they formed an important part of African economies and had found their own ways in which to deal with market instability and uncertainty.

THE SOUTH AFRICAN SCENE

Since the 1994 elections, black economic empowerment and a more equal distribution of income had been high on the agenda of the new government. SMMEs had been seen as key to dealing with high unemployment, activating domestic/international competitiveness, redressing apartheid inequalities, and helping to meet basic needs.

Government had introduced a number of supply-side measures to "create an enabling environment" and "to level the playing field" for SMMEs. These were aimed at dealing with the constraints faced by the sector and helping to make them more competitive.

This had seen the establishment of Ntsika Enterprise Promotion Agency and Khula Finance Ltd to complement the activities of the National Small Business Council and Centre for Small Business Promotion and act as intermediaries to deal with issues such as access to finance and information. The Department of Trade and Industry (DTI) also administered programmes aimed at increasing SMME competitiveness through providing co-financing for the acquisition of new technology. Regulatory reforms had included reforms of state procurement policies aimed at targeting SMMEs. However, no clear differentiation between promoting dynamic firms on the one hand, and survivalist activities on the other, had been made. There were indications that the government had in fact severely underestimated the problems involved in setting up a whole set of new support institutions, the capacity of these institutions to deliver and the ability of the existing NGO network to become involved in a highly ambitious set of programmes.

PRELIMINARY RESEARCH FINDINGS: SMME SECTOR WITH LIMITED CAPACITIES DESPITE GOVERNMENT SUPPORT

Since 1994, there had been an explosion of literature on microenterprises which had mainly emanated from cross-sectional surveys with a focus on growth constraints. Literature on established successful SMMEs, by contrast, was rather sparse and few researchers had commented on the effectiveness of the various SMME support measures implemented since 1995. Nevertheless, a common thread running through the emerging body of literature on South African SMMEs suggested that a mismatch existed between the model of the SMME sector used by South African policy makers and its reality. For example:

the size of the quite heterogenous SMME economy (both formal and informal) was marked by a numerical majority of micro and survivalist enterprises predominantly in the retail sector. The few medium-sized SMMEs that existed were responsible for most of SMME employment.

SMMEs contribution to employment growth was relatively low because the majority of micro-enterprises remained one-person operations because of the phenomenon of "jobless growth" since the late 1990s.

only a minority of all newly established SMMEs survived the first two critical years of their existence. Established enterprises grew more slowly the older they were, and as their owner-managers aged, and seemingly "died" with their owners.

wage and working conditions in emerging SMMEs were uniformly poor both for owners and their employees.

SMME performance did not only depend on the removal of constraints by means of supportive supply-side measures, but also on industrial and market structures, in particular high concentration, which were deeply rooted in the South African economy.

It was therefore argued that:

The roles SMMEs were expected to play were so divergent that only a small segment of the entire SMME economy would ever fulfil all of them, and that, therefore, a hierarchy of importance should be established and policies adjusted accordingly.

The policies aimed at upgrading SMMEs had not created "the enabling environment conducive to SMME growth" due to poor and cumbersome implementation on the one hand, and because SMME policy measures were overly supply-oriented and did not tamper with the intersecting distortions of highly concentrated market structures, and the lobbying by corporates of government on the other.
A serious attempt to promote SMMEs required a reformulation of SMME policy and the restructuring of support institutions informed by contemporary research findings together with a concerted effort to address the high concentration of industries, retail and financial sectors.

RESEARCHING ESTABLISHED SMME'S AND THEIR CONTRIBUTION TO EMPLOYMENT GROWTH IN SOUTH AFRICA

Theoretical considerations

SMME's contribution to employment growth was both a result of new firm formation and employment increases by existing SMMEs. In limiting this investigation to employment growth by existing SMMEs, two questions had to be answered. First, which were the necessary conditions for employment growth in an SMME, and second, whether these preconditions were enough of an explanation for employment growth or if there were additional factors which determined this?

Employment growth was usually conditioned by the availability of internally or externally generated "free" financial resources, or increasing returns or borrowed capital. The owner-manager of an SMME borrowed capital for expansion if the total costs of the loan were lower than the expected future returns. The owner-manager's assessment was based on his/her perception of the macro-economy, current market conditions, and his/her
future aspirations.

Increasing returns, on the other hand, was the result of a multiplicity of factors internal and external to an SMME. There was therefore no limited set of factors which explained it, and all theoretical approaches developed so far were fragmentary in that they over-emphasised the importance of a specific aspect while underrating or omitting others.

Access to finance did not invariably translate into job creation. Production output might be increased by higher productivity by current employees because of money spent on training, for example, rather than by increasing the number of employees. Alternatively, production could be increased by upgrading, or adding to, equipment. The owner-manager generally took the strategic decision of how to grow the firm, and these choices were influenced by perceptions of the business environment and aspirations. It might be decided not to grow the SMME at all, despite favourable market conditions, and invest the profits elsewhere.

SURVEY RESULTS

Surveys were conducted into manufacturing SMMEs in three regions – the Western Cape, the Vaal Triangle and Gauteng/the Witwatersrand. All firms were "established" or formerly registered firms and their labour forces were protected by current labour legislation. Most of the SMMEs were privately, white-owned enterprises and older than three years.

Western Cape

SMMEs made up the majority of manufacturing firms in the Western Cape, but did not show as strong an industry dominance as those in Gauteng did. The most prominent sub-sectors were basic and fabricated metal products; clothing and footwear; pulp and paper products; food, beverages and tobacco; wearing apparel; chemicals, rubber and plastics; and furniture.

Of the manufacturing SMMEs surveyed, 65% reported good growth between 1994 and 1998 while only 41% increased their labour force and 38% reported staff cutbacks. Looking forward, 61% of SMMEs projected sales increases but only 35% planned to increase their labour force.

Key constraints were identified as being market development and rising labour and other input costs. They seemed to believe that their survival was threatened by factors beyond their control but did not seem to be doing much to explore new markets beyond the Western Cape. They also showed little initiative to technically improve their production capacity through buying new equipment, more training or specialised sub-contracting. They also generally lacked standardised quality control procedures.

While most firms reported that they would continue to grow their turnover, only about half aimed to increase their workforce. Reasons ranged from "preferring the SMME to be a manageable size" and "increasing efficiency through training and restructuring" instead of "being scared because the new labour laws and wage agreements turn the employee into a high fixed cost with unpredictable returns."

Despite the relatively high interest rates at the time of the survey, several manufacturers indicated that they would rather invest in computerised equipment, which could be sub-let and used flexibly according to demand, than in more permanent staff. Other SMMEs relied on subcontracting or casual labour to increase production capacity during times of high demand. Elderly entrepreneurs did not aim to grow their businesses further because of the risk involved and because they were close to retirement.

Vaal Triangle

This had long been considered South Africa's "power house", hosting the production plants of major players in the steel-minerals-energy complex (SMEC), such as Iscor and Sasol, and their smaller subcontractors. But the once-vibrant economy of the Vaal Triangle was currently struggling to adjust to the consequences of global competition.

For example, the need to become internationally competitive forced Iscor and other large corporations to restructure, resulting in direct job losses while their smaller sub-contractors faced lower demand in both regional and national markets, and increased pressure to improve quality to meet international standards.

The SMMEs in the Vaal Triangle were mostly involved in metalworking and non-metallic minerals. Most of the sample firms reported positive growth in turnover and profits between 1994 and 1999, and projected this trend to continue over the next five years. But the 1999 election year had proved "difficult" for many of them and left very small firms more doubtful about their future. In addition, 35% of the sample firms reported to have cut back on their work force over the past four years with only 15% increasing their work force in 1999. Most firms were optimistic about their future turnover and profit prospects, but only 21% expected to increase their labour forces, indicating "jobless growth."

Micro and very small enterprises made up nearly all of the non-growing businesses, reporting no change or a decline in profits, turnover and numbers of employees. Eight of the nine largest SMMEs, by contrast, had grown and were growing in terms of turnover and profits, but not in numbers of employees.

The firms also largely blamed external factors for holding back their growth. These included increased competition and rising input costs. The Vaal SMME manufacturing economy was very much a "self-contained" region when it came to sourcing intermediate products and absorbing end products. Very small enterprises complained about strong competition from former Iscor employees who had started their own businesses and operated from their backyards with little or no overheads. In addition, the higher than export prices of steel and aluminium scrap sold domestically were seen to be eroding the competitiveness of metalworking firms in the Vaal Triangle. But a certain segment of the Vaal's small enterprise economy did not aspire to growth at all and would prefer it if "government left us alone."

Job creation was not a high priority for most firms, which concentrated on improving productivity through upgrading equipment, re-organising production and developing new products for new markets.

Gauteng

This province was often described as the industrial heartland of the country as it hosted about 43% of all manufacturing establishments which contributed 38% of overall manufacturing employment and 41% of manufacturing gross output.

Metalworking dominated production but other sectors included printing, wearing apparel and other textiles, plastics and other chemical products and furniture.

SMMEs surveyed were relatively optimistic about their growth prospects. About 60% believed that, after having survived the first years of trade liberalisation and inroads into their markets, they could continue to grow their turnover. Some, however, reported high levels of uncertainty about their volatile markets and could not comment on their future performance. Elderly entrepreneurs, in particular, did not plan to grow their businesses. As in the other areas surveyed, "jobless growth" seemed to dominate. Exporting firms, which made up 44% of the sample, did not expect more intense employment growth than non-exporting firms. While the exporting firms would be more likely to survive and offer more secure employment, they needed to remain internationally competitive, which ruled out any employment increases and required firms to use current labour and capital equipment more efficiently instead.

A stagnant economy, increasing import penetration and "first world labour regulations" were seen as being at the heart of their problems. They did, however, recognise that they had "missed out on establishing good labour relations in prosperous times and now have to deal with both a more demanding labour force and a shrinking market at the same time". As a result, they were keen to improve labour relations and human resource development as well as market development. There were indications, however, that many owner-managers overrated the importance of market development per se, and underestimated the need to increase competencies internally to be able to compete successfully by increasing labour productivity through motivation and training, production re-organisation and upgrading of equipment.

Of the 58% of SMMEs surveyed which planned to increase sales, only every third planned to do so by taking on extra workers. About 40% of all SMMEs planned to cut back on their workforce although only about 5% expected a decline in turnover. Again, "jobless growth" dominated.

Witwatersrand

This survey covered the clothing, furniture and metalworking SMMEs, most of which had experienced some growth between 1994 and 1998 but which were not necessarily likely to continue to do so unless they became more competitive. Their growth had been "jobless", with most firms reporting that they had invested in new equipment, indicating that labour was being replaced by capital.

In 1998, several metalworking and furniture SMMEs experienced lower turnovers and profits, but the clothing industry SMMEs experienced much sharper declines in turnover, profits and employment. Labour was not always replaced by capital as capital investments also declined. Most furniture SMMEs were able to retain their turnover and profit levels between 1998 and 2000. About 30% took on extra workers in 1998 but about the same percentage reduced their labour forces between 1998 and 2000.

Between 1994 and 1998, most of the SMMEs increased the number of their permanent employees while about a third of all firms undertook retrenchments. Since 1998, employment changes were less uniform as industries underwent different structural, technological and market changes.

The SMMEs reported that they were finding it increasingly difficult to grow in a more liberalised South African economy and a more regulated labour market. Demand had shrunk, illegal imports were eroding markets and rising labour costs were blamed for retrenchments. Clothing SMMEs were finding themselves less competitive in the lower end of the South African market, but said it was difficult to identify niches in the upper end of the market. Knitwear companies supplying the upper end of the market faced lower domestic demand and found it difficult to penetrate export markets because of their outdated technology and the inferior quality of the yarn used. Several cut-make-and-trim (CMT) manufacturers, however, seemed to benefit from their proximity to designers and end markets, they managed to grow by identifying niches, even at the lower end. About two-third of these growing firms, however, sub-contracted more or re-organised current labour and equipment instead of taking on more employees.

SMMEs in the furniture sector reported falling demand at the higher and lower end of the market with rising input costs widening the gap between turnover and profit levels. As a result, more labour intensive equipment was being used with labour legislation being seen as a major barrier to job creation and training. Metalworking SMMEs also faced shrinking demand, import competition and capital intensive development.

CONCLUSIONS AND RECOMMENDATIONS

While it was widely agreed that South African manufacturing SMMEs were an important part of domestic economic activity, it was less clear to what extent they were able to contribute to economic and employment growth. Secondary data on SMMEs was generally poor, and preliminary research posed questions about considering SMMEs as the panacea for problems of unemployment growth and income distribution. More research was clearly needed while support policies needed to be reviewed.

Part of the slack employment growth in SMMEs was because they were not able to grow. Nevertheless, the majority of the sample SMMEs experienced turnover in profit growth, but refrained from growing their labour force. This phenomenon of jobless growth led one to conclude that assistance to SMMEs, even if effectively implemented and complimented by a revised competition policy, might result in SMMEs contributing more to economic growth, but it did not automatically translate into employment creation.

It seemed as if it was necessary to redesign the current SMME policies, clarifying from the outset which of the numerous objectives outlined in the White Paper should be prioritised. SMME supply-side measures and the allocation of resources needed to be actively marketed to their target groups and a more professional institutional network, which included, for example, industry-specific consultants, needed to be established. Parallel to this redesign of SMME policy itself, the weakening or supporting effects of related policies such as competition policy and labour legislation needed to be assessed more carefully, and, depending on priorities, revised accordingly.

DISCUSSION

Albert Berry of the University of Toronto, said the message of the paper was highly consistent with what had been learnt from other countries. The bottom line for South Africans interested in growth with equity was whether it was too pessimistic.

No matter how optimistic one could be about how much good could come out of the healthy growth of this sector, realism dictated that one also recognised that it was terribly easy to make mistakes and have bad policy which became counter-productive.

The outstanding success story of small and medium enterprise was that of Taiwan. It owed a lot to some background conditions, such as agrarian reform prior to the great burst of non-agricultural SME growth, as well as many other factors that most other developing countries have not had. But there was a tremendous gap between the example of Taiwan and that of many governments, which have failed. It was therefore clear that countries had to do their policy thinking in this area in a very prudent fashion. The best first step was to get one's feet pushed into the cold water of difficult questions, the pieces of evidence that suggested that things were not working. There was little evidence, however, that this sector would be "the panacea" which so many governments hoped that it might be. As with labour market policy, a more coherent and complete body of information about this sector was needed.

It had not been at all surprising that total employment in the small and medium sector had not grown. In firms with up to 200 workers, it was not at all uncommon to see substantial growth in output, but very little employment growth. This was associated with the increase in labour productivity and that was the name of the game. To get really rapid net employment creation in small or medium firm, one had to have very fast growth, or a substantial growth in the number of firms or in a sub-set of the firms while also achieving increases in labour productivity. In Taiwan, there had been very rapid employment growth in the SME sector as well as a proliferation of new firms.

He was not too concerned about the fact that the majority of these firms were not growing as that was the norm. It was always a minority of firms that underwent rapid growth of both output and employment. This was even more so in the micro sector.

Not nearly enough was known about the medium-term dynamics of these firms. In recent work done in Colombia, Berry said that the most striking single result was that a firm which, 15 years after its inception one would define as a big success, had been through a couple of crises in the interim. It had grown fast, shrunk, grown again and shrunk again. Those ups and downs at the firm level, and the reasons for them, and the efficiency implications of them, were very badly understood internationally. But in economies that were relatively open and subject to a lot of exogenous shocks, one really needed to understand those things a good deal better.

One of the reasons that the pessimistic growth story was not surprising was that it was the norm when the macro economy was not doing well. It was rare to see small and medium enterprises shooting up when the macro economy was not. The basis on which SMEs grew well was either a growing domestic market, or a substantial breakthrough into foreign markets. It was not easy to break into foreign markets, so normally SME dynamism reflected a growing domestic market and increased domestic income and purchasing power.

SME dynamism therefore complemented overall growth and very infrequently was the main source of that overall economic growth. That had both positive and negative implications, but, at least in the context of the slow growing South African economy here, indicated that the SME sector could not have done better. It undoubtedly would have done better had the macro economy been doing better, and if the economy grew faster in the future, the SME sector should complement that growth and kick out a substantial amount of employment. And another way of putting that was that, for the most part, what distinguished between fast and slow growth in this sector was demand conditions, not supply conditions, not cost reduction. This did not mean that nothing should be done about supply side issues because if the sector was ultimately to be really important, then cost reduction had to come from the supply side, and it had to come from good policy.

Government should work on developing effective linkages between large firms and small firms. It was discouraging when, in the steel sector the small and medium metalworking firms had not established linkages with the large-scale steel producing sector. One would expect that to be a prerequisite for a really high success in the SME metal working sector. Training was clearly very important because the capacity for in-house SME training was not high.

In general discussion, Dirck Stryker of AIRD, said that the paper had covered a period in which South Africa had gone through enormous adjustments with trade barriers coming down, tariffs being lowered and quantitative restrictions being eliminated. In this situation, one would expect that SMEs would do exactly what they did, which was to hunker down, get rid of excess labour, try to become more efficient and try to become competitive.

At the same time, there had not really been any analysis into what the real equilibrium exchange rate should be. There had been a very "monetary" approach to the exchange rate while the economy was undergoing fundamental restructuring. If there had been a quicker depreciation of the exchange rate from 1994/95, this would have helped to take some of the burden off firms that suddenly found themselves swamped by imports.

Geeta Kingdon of the University of Oxford said greater attention should be paid to the role played by wage-setting institutions, in particular the bargaining councils and the industrial councils, on job creation. They could impose high wage costs on small firms, which could be a very powerful factor inhibiting employment growth in the small firm sector.

Kesper said high wage levels were only considered constraints in taking on entry-level workers with no skills while labour regulations, like the Employment Equity Act and the Skills Development Act, were considered constraints because the costs involved of retrenchments were considered prohibitive. This was why sub-contracting had become so popular.

Out-sourcing was quite typical in metalworking and clothing, but was found to a lesser extent in furniture. It depended very much which industries were involved and, again, it might be related to high wage costs.

Keryn House of the Department of Trade and Industry said she believed that the jobless growth was actually less related to productivity and more related to out-sourcing and sub-contracting of small firms, big or small. The problem was that 90% of their production was for local market, resulting in remarkable competition.

Kesper said SMEs were not supplying large retail groups because of the longer terms, problems of delivery, meeting lead times etc. So it might be difficult to link their slow growth to the stagnation in the large retail groups.

On government incentives for SMEs, House said she would have appreciated more detail, on which had been used. She had found that, for most small firms in clothing, the first thing that destroyed them was cash flow because of the long period between buying raw materials and being paid by the retailer or the trader at the very end.

Kesper said most SMEs were not aware of government incentives and, anyway, regarded government not as an ally but a hostile institution.

REGULATING CASUAL WORK, OR CASUALISING PERMANENT WORK? CHANGING PATTERNS OF EMPLOYMENT IN SOUTH AFRICA'S RETAIL SECTOR

Marlea Clarke, Institute of Development and Labour Law

A complex and contradictory process of labour market restructuring had been underway in the country since the democratic elections in 1994. On the one hand, there had been a range of new policies and legislation ranging from from the Basic Conditions of Employment Act to the Skills Development Act and the Employment Equity Act. These had been aimed at protecting workers who had been marginalised or were on the periphery of the labour market, while also trying to encourage new entry into the labour market for workers who had been disadvantaged in the past.

On the other hand, there had been the effects of globalisation and labour market restructuring. These had included jobless growth and retrenchments as jobs were lost and shed, or jobs were relocated from sectors that were previously regulated. In some regulated sectors, core parts of businesses were being out-sourced, sub-contracted or casualised in a variety of ways.

There was very little national research or statistics available to trace the rise of casual, part-time employment in comparison to full-time employment. Clarke had therefore had to undertake secondary and primary research through extensive interviews with bargaining councils, employers, workers, unions, shop stewards and some of the bigger retail stores such as Shoprite and Pick 'n Pay as well as new franchises such as seven-eleven and Spar.

BACKGROUND

Between 1948 and 1990, a very complex system of regulation developed whereby wage determinations, Industrial Council agreements, labour court orders and a variety of other regulations were used to determine wages and working conditions for workers in most sectors of the economy.

What emerged was a system of regulated rigidity, whereby workers in core sectors, largely white workers, were protected with their wages and working conditions regulated through Industrial Council agreements. For many black workers, their mobility in and out of the cities and between homelands and rural areas, and their access to jobs was very tightly controlled by a whole range of apartheid policies.

For whites, then, there was a very clear, standard employment relationship, unlike that had emerged in Canada, the US and many other western countries. This was often described as including a continuous full-time employment relationship where the worker often had one employer, and normally worked on that employer's premises under his or her supervision. Often the standard employment relationship was both an employment contract, a permanent full-time job, and a range of other social benefits such as unemployment insurance, pension schemes and a range of other social benefits. In many of these there were clear prohibitions against outworking, sub-contracting and homework. This was done to protect white workers in those sectors, but the result of that protection was that a fairly typical standard employment relationship emerged as the normative model of employment.

At the same time, a non-standard employment relationship emerged to support the standard employment relationship. This was better defined by what it was not as it included a range of precarious employment relationships from part-time to casual, outwork, irregular work, under-employment, fixed term contracts, seasonal and temporary employment.

A range of prohibitions were written into Industrial Council agreements and wage agreements that prohibited these forms of non-standard employment. For black workers, there were always levels of casualisation which contained an element of standardisation. For example, the mining sector was based on the migrant labour system which had a level of standardisation within non-employment relationships, and this had fundamentally changed in the last five to six years.

So the majority of mine workers ended up returning to the same mine and in some cases working with the same work crew, doing the same job year after year. Influx control regulations meant that they could not reside in the cities. They went back to the homelands or they went back to whatever country in the region they were from. There was a kind of standard employment relationship, in which there was a kind of regular employment, even though it was fixed term contracts.

DEREGULATION GETS UNDERWAY

In the late 1980s, a process of deregulation was implemented, through legislative changes and administrative exemptions, and through a steady de-emphasis, monitoring and enforcement. In terms of legislative change, the most significant piece of legislation was the Temporary Removal of Restrictions on Economic Activity Act passed in 1986. This permitted the suspension of labour legislation if it was seen to impede competition or the creation of job opportunities. So there were a range of businesses that were exempt from legislation. Many of these were established in what was called the small business hives. In terms of administrative exemptions, Industrial Council agreements, wage agreements and labour orders were encouraged to implement the policies of deregulation. Small employers were increasingly excluded from the scope of Bargaining Council Agreements or exempted from wage control. At the same time, there was a steady de-emphasis in monitoring and enforcement because of the lack of labour inspectors. Many sectors were poorly regulated or the legislation poorly enforced. So these three processes of deregulation, combined with the broader process of privatisation and a number of other economic changes, gave rise to new forms of employment. These changes facilitated work plant restructuring and a central component of work plant restructuring was the changing nature of employment.

Clarke said she had clustered the changing nature of employment into two main areas. The one, drawing on existing literature, she called externalisation. This included outsourcing, sub-contracting, homeworking, a number of other processes that took work away from the business and moved it some place else. Casualisation was the other cluster. This included the replacement of full-time permanent work with a range of different, more casual employment relationships - unstable or regular work, short-term, fixed-term contracts, seasonal, part-time and casual employment relationships.

A number of different patterns had emerged. In the hospitality sector, there had been a dramatic rise in the outsourcing of what was considered non-core business activity. A manager at a large hotel in Cape Town said non-core activities included doing the laundry or mowing the lawn. Some hotels had essentially outsourced all their activities and used labour brokers and temp agencies when they needed them.

The owner/driver scheme in the transportation industry or the shift away from permanent employment to a tendering process, whereby businesses tendered for routes which they got on the basis of a 5-year contract. There were a number of clauses to encourage small businesses by giving particular kinds of concessions to them. What this meant was that bus drivers, for example, were no longer be employed as full-time permanent workers. They were employed on 5-year contracts or contracts for a shorter period than that.

The universities had also engaged in a process of outsourcing. For example, the University of Cape Town had outsourced security, cleaning, kitchen, canteen, and a range of other activities. Research had shown that, in all cases, wages and working conditions dropped. The cleaning staff were now employed by Supercare, which was a sub-contracted cleaning company, and the wages of workers had dropped by half. They had lost benefits and the housing subsidies that they used to have.

In the clothing sector, homeworking had increased although there had not been enough research to indicate by how much this had happened. In the retail industry, work had been restructured through a process of casualisation. However, there had also been a process of externalisation in that small businesses or producers were increasingly being brought to supply services and products. For example, Spar bought most of its chickens from small producers. At Woolworths, 20% of its deli now came from homeworkers and small businesses.

At Woolworths 15 years ago, approximately 30% of its staff was casual and 70% full-time. That had completely shifted around and today Woolworths had about 70% or more of its workforce employed as casual workers, and only 30% were full-time. At Pick 'n Pay, the ratio was about 60/40. There was still some difference between the Western Cape and other areas, but overall it came to about 60/40.

Over the last five to seven years, Pick 'n Pay had been engaged in quite interesting negotiations with The South African Commercial, Catering and Allied Workers Union (SACCAWU). Not only had it casualised its workforce through increasingly hiring casual employees, but it had also casualised full-time workers by making them much more flexible in a variety of ways. This was being regulated through a "Flexibility and Mobility" agreement that Pick 'n Pay signed with the union. Shoprite had a similar agreement.

In the smaller stores, the franchises such as seven-eleven and Spar and at petrol stations, there was a slightly different process underway. Seven-eleven, for example, claimed to have a much higher percentage of its workforce as permanent workers, although its wages and working conditions were very low. As a result, there was a dramatic turnover rate in the employees in these shops. So although they were hired as permanent full-time workers, the majority of the workers seemed to only stay around for very short-term contracts, leave and then sometimes go back.

The latest series of amendments to labour legislation were very problematic in a number of ways. Although they did facilitate exemptions being given to small business, that had been the case for a long time as Industrial Council agreements granted exemptions to small businesses. But some of the changes might serve to continue processes of casualisation. Business said that the government had taken small steps where big strides were needed. Cosatu, however, had argued that the amendments upset the delicate balance that had been struck. Clarke believed that both were misguided.

There was no delicate balance. There had been an attempt to increasingly regulate the labour market. While some of the changes had been very progressive and very useful, rather than there being a delicate balance, there had been a massive change in the workforce through increased casualisation, and there was an "incredible problem" emerging that had to be confronted. She was not convinced that the government or Cosatu were taking this as seriously as they needed to.

One of the stores she had visited was looking into retrenching all its cashiers and getting cashiers who were employed by a labour broker or a temp agency. Ironically, the temporary employment agency sector was the fastest growing industry in the country right now.

She had asked how businesses could maintain good customer service if they had employees that were not employed by them but were working for a labour broker or temp agency. She was told: "Cashiers at my store aren't friendly or committed to the company, but we have to pay them anyway. If we outsource the service, surely it can't get any worse, and we won't have the hassle of pay problems."

DISCUSSION

Trudi Hartzenberg of the University of Cape was the discussant and focused on the externalisation and casualisation of employment. This involved the transformation of the standard employment relationship into a new relationship between employer and employee. This involved new ways of doing business. In other words, what was underway was a process of industrial and organisational restructuring, as well as labour market restructuring, taking place side-by-side.

One also had to bear in mind the sectoral specific characteristics. Retail had a very distinct seasonal nature as far as business activity was concerned. This industrial and organisational restructuring in South Africa had to be examined more closely, and compared to trends elsewhere in the world. The retail sector had also been very much driven by merger and acquisition activities and an examination of market concentration concerns and sectoral differences could also be important. Also interesting would be a decomposition analysis by skill level and job or occupational category.

TRADE COMPETITIVENESS AND LABOUR MARKETS

1. IMPACT OF TRADE LIBERALISATION ON EMPLOYMENT IN SOUTH AFRICA

Johan Fedderke, University of the Witwatersrand

(This paper was based on work done in conjunction with the Department of Economics at the University of Edinburgh and attempted to apply new econometric techniques to existing theoretical propositions in the Stolper-Samuelson theorem)

2. TRADE AND LABOUR REVISITED

Tahir Abdi, International Development Research Centre, Canada

Fedderke said South Africa had faced two major macro-economic questions in the 1990s. One had undoubtedly been the question of labour and unemployment, and the second was the question of how to speed up growth. There was a relationship between the two and the paper would focus on the controversy that had emerged in South African macro-economic debates on whether or not trade liberalisation had been good or bad for employment. If one looked at the raw data, there was certainly a case to be answered because there had been a very clear and big structural break in South Africa's formal sector employment patterns around about 1990. Employment has not increased and, in fact, fell during the course of the 1990s. The real question to be answered here was what had suddenly happened to bring about this reversal. One response had been to blame it on changes in the trade regime as trade liberalisation began to kick in, with negative consequences for the South African labour market. Fedderke said the evidence did not, in fact, support that particular interpretation.

The Stolper-Samuelson theorem predicted that the strongest product price changes in economies liberalising their trade regimes would take place in sectors using abundant factors of production. The empirical validity of this fact would confirm that trade liberalisation was working for the developing world. Since the corollary to output price changes was that the earnings of the abundant factors of production would grow, such findings would also carry clear welfare implications. One means of assessing the appropriateness of the trade policy assumed by much of the developing world was therefore to examine whether Stolper-Samuelson effects were present in developing country contexts.

Recent experience in many developed countries had been a large fall in the level of employment among the unskilled at the same time as the employment of skilled labour had risen. The result had been rising wage inequality. Trade with less developed countries endowed with an abundance of unskilled labour had been advanced as one possible explanation, with protectionist impulses lurking not far below the surface.

However, the theorem was less conclusive about the effect of increased trade openness on middle income countries, which were likely to share characteristics with both developed and less developed countries. Perhaps one implication was that the impact of trade liberalisation was likely to be sectorally specific, depending on whether trade of the middle income country was dominated by exchange with developed or less developed economies. Nevertheless, predictions of changing factor usage patterns for middle income countries remained more ambiguous than for the more extreme examples afforded by a comparison of the industrialised and less developed countries.

In addition, while trade liberalisation could be plausibly linked to a labour market impact, it was not the only possible reason for price and demand changes in labour markets. Changes in the pattern of wages and employment might also reflect the impact of skill-based technological change.

In South Africa, Fedderke said he had found, via the product price effects equation, that output prices increased most strongly in sectors that were labour intensive. Trade-mandated earnings increases were positive for both labour and capital, though the increase was stronger for the former. By contrast, technology had mandated negative earnings increases for both factors.

Results obtained from the labour-requirements approach were entirely consistent with these findings. Overall, the results suggested that the growth of real wage rates was a plausible explanation for the high and sustained levels of unemployment in South Africa's labour markets. By contrast, trade liberalisation, rather than having a negative effect on labour demand, had stimulated the demand for labour.

A VIEW FROM THE SOUTH

Abdi said there continued to be considerable concern that the expansion of trade with developing countries (the South) was lowering the relative wages of unskilled labour in developed countries (the North). The issue had been highlighted by the experience of the US, where a marked decline in the relative wage had been observed in the 1980s and 1990s. The decline occurred during the period when the US was following trade liberalization policies and expanding its imports from the South.

Labour economists believed that trade liberalisation was causing the decline in the relative wage of unskilled workers in the North because of increased imports of commodities from developing countries that required mainly unskilled workers. As a result, the prices of those commodities could go down and, as a result, resources could be shifted from the production of importable goods to exportable goods, affecting relative wages in the North.

Trade economists, on the other hand, believed that, to connect the relationship between trade and the relative wage, one had to look at relative prices. If relative prices were not changing in the required direction, then it was hard to connect the impact of trade on the relative wage. Most of the studies on this issue to date, however, had concentrated on the North, with very little being done on the situation in developing countries.

Abdi focused on three main issues. First, he examined how the relative wages of skilled and unskilled workers were evolving in developing countries. If the trade impact existed in connection with the relative wage changes, then one should observe trends in the relative wage of unskilled workers in developing countries. He also examined whether there was any empirical evidence to support the hypothesis that the wages of unskilled workers were improved by trade liberalisation, or by technology. If technology had had a significant impact on the relative wage, the argument was that technological improvement was in favour of the skill intensive sector. If this held up, one could say that as the output of the skilled sector increased, the demand for skilled labour increased and also the skilled wage rate. He also looked at the change in the relative supply of skilled and unskilled workers in developing countries.

But he soon realised that would be very difficult to get data on developing countries, especially on these sorts of sensitive issues. In the end, he was only able to include 11 countries in his analysis using panel data from 1985 to 1994.

To explore the three effects on the relative wage, he assumed a standard Heckcher-Ohlin-Samuelson model. This assumed that both North and South had two countries with one goal each - one had a skilled labour intensive goal and the other had an unskilled labour goal (See TIPS website for full methodology). He found considerable variations over time in each and every country. There was no systematic trend, no clear trend at all. There was some tendency for relative wages to increase in Korea, Venezuela and Uruguay but, on the other hand, they decreased in Egypt and Thailand. For the rest of the countries, there was no systematic trend.

When he found inconsistency, he looked at the average annual changes in the relative wage. Again, he found that the fluctuations in relative wage, technology, trade liberalisation and supply did not help to make an association between the variables and the relative wage. Finally, he looked at the average levels and found that there was some association between the relative wage and trade openness, and between the relative wage and technology, the relative wage and relative supply. If one looked at relative wage and trade openness and ignored the two outliers, Egypt and Singapore, there was an upward sloping line which meant that the greater the trade openness, the higher the relative wages of unskilled workers in developing countries.

Similarly, if one looked at technology, there was a negative trend. So an increase in relative technology meant a decrease in the relative wage. And thirdly, if one looked at variables, there was also an upward sloping trend, ignoring Korea and Egypt, but it was not very clear. It had been assumed that technological changes and trade liberalization were independent factors. However, it was possible that at least for developing countries technology was transferred largely through international trade. If this was the case, then trade liberalisation could have an impact on income inequality indirectly through technology transfer. It was important, however, that policy actions should not be aimed at restructuring the trade liberalisation process but rather to provide incentives for workers and firms to adjust and gain from these economic changes.

One possibility was to improve the productivity of unskilled workers through enhanced vocational training and educational opportunities. This would, provide the unskilled workers opportunities to learn new skills and to adjust successfully in the changing economic environment. He had not found strong evidence that trade liberalisation influenced the relative wage of unskilled or skilled workers in the south. Nor had he found evidence that relative supply changes for skilled and unskilled workers also affected the relative wage. He did, however, find some support for the argument that fixed neutral technological improvement in the skilled labour intensive sector was a key determinant on the relative wage. There was also no clear evidence about the cause of income inequality in developed countries.

He strongly recommended that policymakers should not trade off the long-term benefits of trade liberalisation with short-term gains from a restricted trade policy. Because of globalisation and technological improvements, today's world economy was much healthier than in the past and the benefits of these improvements could only be achieved through successful long-term planning.

DISCUSSION

The discussant for Fedderke's paper was Adrian Wood of IDS, Sussex, who praised both speakers for taking some of the techniques that had been repeatedly applied to northern countries and applying them in a southern country.

Fedderke had been working mainly with a capital:labour split rather than an skilled:unskilled labour split, which had characterised most of the work in the north. This might be more appropriate in the south, but was also more of a switch, or a changing of horses, as most of the work that had been done in the north had tended to assume that capital was internationally mobile and therefore that its price was fixed and was not affected by trade. If one accepted that assumption, that completely changed the analysis. It was very different from looking at skilled and unskilled labour where both factors were internationally immobile. This implied more of a change in the rules of the game than was acknowledged in the paper.

It also had to be asked to what extent was trade liberalisation really driving the changes in prices. He had found that changes in sectoral product prices had been increasing the demand for labour, and, to some extent, the demand for unskilled labour. If that was the case, then it was really a question about to what extent the product price changes were caused by changes in the trade regime, or, indeed, by changes in the world economy. The South African economy, for example, had gone through some pretty drastic changes in trade regimes through substantial liberalization in the 1990s. It would be interesting to look at what had happened to the rates of protection of labour intensive sectors versus the rates of protection of capital skill intensive sectors. If the rise in the relative price of labour intensive goods was being driven by changes in the trade regime, that would have required protection to come down more in the skilled capital intensive sectors than in the labour intensive sectors. He did not know if this argument was valid, but said it would certainly be unusual, even in developing countries. Protection had been highest in labour intensive sectors where it had tended to come down most. It would therefore be important to look very carefully at changes in trade regime data before one could connect this up with the product price changes and come to any strong conclusions as to whether Samuelson was right.

One also had to ask what else might have caused the observed changes in the structure of product prices, other than changes in the trade regime or in technologies. In particular, what might have caused the prices in labour intensive sectors to go up faster than in other sectors during the 1990s? One possibility was changes in product mixes within sectors.

Much depended on how prices were being measured and, in particular, how the weights of the different sub-sectors within each sector would affect the measure that had been used. One possibility, based on developments in the 1990s as a result of increased exposure of trade, was that the labour intensive sub-sectors within each broad sector shrank. This would tend to raise the average sectoral price more in the sectors that were most labour intensive. This would result in a decline in formal sector employment, particularly concentrated on unskilled labour, and at the same time, have the prices of the more labour intensive sectors, on average, going up faster than those of the less labour intensive sectors. This was potentially another way of squaring the circle.

In general discussion, it was pointed out that if one examined the structure of production in South Africa, there was strong evidence to suggest that since the mid 1980s, the structural composition of exports had shifted towards more capital intensive products while the economy became more unskilled abundant. It was therefore not necessarily valid to say that labour intensive products had risen, and, if labour intensive product prices actually fell, one could have seen labour intensive sectors negatively affected. Another speaker commented that people were a bit schizophrenic sometimes in that the original theorem was put as labour to land, while the text books usually put it as labour to capital. It was worthwhile remembering this because behind the South African story was an abundance of natural resources and the effect that had on the manufacturing sector was worth taking into account. It had also been interesting to hear at the forum that unskilled labour itself was engaged in some kind of involuntary unemployment, which meant that they could not be factored in.

Fedderke said South Africa had capital controls over the full period covered by his paper, which meant that the movement of capital had not been entirely free and the capital controls, even although they had eased off since 1994, remained in place. That was why it made sense to look at the capital: labour ratio as well. Data availability on the income shares of the skilled and unskilled workers was also not good. He said he had examined the rate of protection and had computed the effective protection rates between 1988 and 1998 to determine whether the protection had remained more or less the same or whether it had become liberalised. It was not really possible to take the effective protection rates back further because of data limitations. However, a lot of the protection moved off non-tariff barriers into tariff barriers and the effective protection rates might actually, potentially at least, paint a somewhat misleading picture.

Lawrence Edwards of the University of Cape Town was the discussant for Abdi's paper and also welcomed the attempt to look at the effects on the South rather than the North. He said the method and the theory used had tried to separate the very confusing relationship between trade liberalisation, technological change, skills changes, etc. He agreed that it was very difficult to find data for developing countries and said that this had, unfortunately, hampered Abdi's ability to analyse the situation entirely successfully.

He did not believe that the trade dependency index was a good measure of trade liberalisation because it did not necessarily say anything about trade liberalisation at all. For example, many domestic policies and domestic distortions could cause the trade dependency ratio to increase. South Africa was a good example.

A further problem was that trade dependency ratio aggregated trade as a whole while what was wanted was an indication of structural shifts in the composition of trade. For example, what one expected to see was the developing countries shifting the structure of their trade toward more low or unskilled intensive exports and start importing more high skilled imports. Using the common aggregate, one could not differentiate that, and one had to rely on the prior assumption that the composition of trade was moving in that direction. And that was partly problematic.

A second problem with the trade index was that Abdi had looked at relative price changes and had linked those to relative wage changes, while also looking at changes in trade flows and linking those to relative wage changes. But he had to make directly the link between relative price changes and relative trade flows. It was not necessarily the case that changes in trade flows would reflect relative price flows. That was an enormous assumption many people would not get away with because of data problems, and this had to be made very clear in one's analysis.

The fact that only 11 countries had been covered in this analysis was also problematic while one could question whether South Korea and Singapore fitted into this less developed region. They were very different to Bangladesh and India and might fall within the middle income range. The effect of middle income countries on trade liberalisation might be very different. He had also been concerned about the attempt to try to look for a relationship between the level of openness and the level of the relative wage. He would have been happier looking for relationships between the change in openness and the change in relative wage, while more thought should be given to the attempt to combine level effects and changes over time effects.

Finally, the theory of what he had been trying to show was far too complex for what could be shown in the estimation techniques. In the end, only technology had been significant. Abdi said the use of different countries had been motivated by the fact that the countries that were more developed had a higher level of technological absorption and would therefore experience a more relative decline in the relative wage. So it did not really matter that some of the countries were very developed or less developed because most of the variations came from the average levels.

SOUTH AFRICA'S INTERNATIONAL COST COMPETITIVENESS

Stephen S Golub, Swathmore College, USA

Golub said the forum had seen the emergence of a "Glenburn Consensus" that the South African unemployment problem could be at least partly alleviated through globalisation. Of course, globalisation was by no means the only answer, but it could be part of the answer as exports could lead to output growth and increased labour demand.

The premise was that by participating in international trade, South Africa could follow the path of the successful developing countries such as the Asian Tigers, Mauritius in Africa and Chile in Latin America. Mexico was now finally also showing some real signs of growth. So he was convinced that with very strong export growth, South Africa could make progress in solving unemployment and improve the standard of living.

TRADE PERFORMANCE

Before 1995, South Africa's trade had grown much more slowly than that of the rest of the world. In the 1980s and early 1990s, exports grew in constant dollar terms by 1% to 2% a year while world trade was growing by about 5%. Some developing and newly industrialised countries had export growth of 10% or more in this period.

In 1995-97, however, South Africa's exports had grown by nearly 9%, slightly exceeding the world average. It then slowed sharply in 1998, but so did world trade due to the Asian crisis. Mainly because the economy was closed to the rest of the world under apartheid and sanctions, manufactured exports had been dismal in the 1980s, actually declining in nominal dollar terms, while some Asian countries had annual growth rates of more than 20% and many others had growth rates of 10%. In the early 1990s, South African manufactured exports grew by more than 20% after a structural shift from primary commodity exports to manufactured exports. In 1995-97, the growth of manufactured exports fell in absolute terms but remained favourable compared to other emerging economies. Inflows of foreign direct investment (FDI) into South Africa had increased in recent years. In 1997, net inflows reached 1.3% of GDP, which was low compared to such countries as Chile, China, Malaysia and Mexico. Inflows declined sharply in 1998 because of the Asian crisis.

INTERNATIONAL COMPETITIVENESS

"International competitiveness" was a term bandied about by policy makers without there being much clarity about what it meant. Paul Krugman had described it as "a dangerous obsession" and had lambasted anybody who used this term. But Golub believed that it could still be used meaningfully. International competitiveness did, however, mean different things to different people. The World Economic Forum looked at it in terms of the general business environment, which, nebulous as this was, was an important idea.

South Africa had to have a fair and viable environment to attract investors and help local firms make the transition to the formal sector.

However, Golub had worked on a more narrow definition of competitiveness - price and cost competitiveness. In particular, he had looked at comparisons of labour costs.

In international literature, this approach involved looking at the real exchange rate, and different measures of real exchange rates and the relative prices were used. The text book example was the relative price of domestic tradables to foreign tradables. More popular among developing countries was the relative price of domestic tradables to domestic non-tradables. Golub favoured the relative unit labour cost measure, which he believed was important because labour costs underpinned the cost of tradable goods. It was important to examine relative versus absolute measures of competitiveness, or the absolute level versus changes over time.

THE SOUTH AFRICAN EXAMPLE

The premise was that South Africa was a high cost country, but although Golub found evidence of this, the picture was more mixed than he had expected. The Finance Department had been a bit surprised about this, but had accepted his analysis of the situation. The striking thing was that South African wages did not appear to be outstripping South African productivity, but South African wages, compared to Malaysian wages, exceeded South African productivity. In other words, South Africa did have a labour cost problem vis-à-vis Malaysia but less so for Korea.

Malaysia and Korea had had more rapid productivity growth than South Africa, while Mexico, particularly after 1982, was very competitive vis-à-vis South Africa. The latter reflected the depreciation of the peso following the 1982 crisis and again following the 1994/95 crisis. Chile was also very competitive vis-à-vis South Africa by this criteria but South African competitiveness improved substantially between 1990 and 1997. South Africa had a competitive edge against Zimbabwe until about 1989, but in the early 1990s there had been a big decline in relative Zimbabwe wages due to the large depreciation of the Zimbabwean currency.

In summary, South African unit labour costs appeared to be competitive against developed countries but much less so against developing countries. To the extent that South Africa competed primarily against other developing countries, there was a serious labour cost problem. Also, the wage/productivity comparisons reported here might understate the adverse effects of high South African labour costs on unemployment. If labour costs were high and inflexible, productivity would rise over time endogenously as firms shed labour and adopted more capital-intensive production techniques, thus raising the marginal and average product of labour. Consequently, an ex post correlation of labour costs and productivity did not by itself prove that labour costs were not "too high". The productivity/wage comparisons, however, were mainly concerned with assessing international competitiveness rather than determining the real wage that cleared the labour market.

In 1990, South African unit labour costs exceeded those of every other developing country Golub looked at. By 1996, the picture was much more mixed. In some cases the relative wage exceeded the relative productivity and in some cases that was not true.

Golub examined several alternative-weighting schemes, including the real effective exchange rates of the South African Reserve Bank and the IMF. He was struck by the very small weight they gave to developing countries. It was, in fact, way below South Africa's actual trade with developing countries. He tried to provide a bigger weight for developing countries, but the findings were not all that different to the labour cost variations.

He then tried to correlate trade flows and competitive indicators. He did not expect much from this because of the structural changes the economy had undergone, but was surprised to get a strikingly strong relationship between his unit labour cost real effective exchange rate measures and real exports, particularly for manufactured goods. The end of apartheid of South Africa had made its goods more welcome in the rest of the world but there was a striking correlation and it was clear that cost competitiveness had an important effect on trade performance.

CONCLUSION

Golub said that he believed that South Africa should stay on course on the GEAR strategy of export-led growth. It would take time for the reforms to have their full effects, but more outward-oriented policies had already paid dividends in the form of strong growth of manufactured exports and increased foreign direct investment.

The improvement in international competitiveness in the 1990s had been an important factor in spurring the growth of manufactured exports. Nevertheless, South African unit labour costs remained high compared to most developing countries. There was certainly no room to increase real wages faster than productivity. On the contrary, wage moderation and/or continued real rand depreciation (uncompensated by inflation) were necessary to gain competitiveness vis-a-vis other emerging markets. It should be recognised, however, that macro-economic competitiveness achieved by real depreciation of the rand by itself was insufficient to resolve the unemployment problem. Labour market rigidities, crime and educational inadequacies also had to be tackled directly. These microeconomic reforms would complement improved international competitiveness in leading South Africa towards fulfiling the objectives of the GEAR strategy.

DISCUSSION

The discussant, Rohinton Medhora from the International Development Research Centre (IDRC) in Canada, said the IDRC had undertaken an 8-country, cross-country project on the links between finance and competitiveness which had found an even more macro self-conceptualisation of competitiveness than had been used in this paper. This essentially said competitiveness was the degree of income or employment growth that could be generated without running into balance of payments difficulties. South Africa's present current account deficits were not consistent with the growth rate and should be linked with higher rates of growth. So there had been a bit of pessimism in this project which slightly went against Golub's general view that competitiveness had improved throughout the 1990s. All his measures had been consistent in and of themselves, but the larger picture seemed to suggest otherwise. One hypothesis was that a lot of the income growth that had happened in the past decade had come about by eating into capacity utilisation.

He had thought it remarkable that the paper had not mentioned "Dutch Disease" but it had struck him that the underlying trend in South African competitiveness had been determined by what had been happening in the resource sector. Resource booms and busts had not only determined the exchange rate but also the degree to which manufacturing exports could respond to so-called true incentives. This had to be seen in the context of Golub's very useful distinction between macro-reform and micro-reform. Golub might want to further examine the finding by the IDRC project that neither unit labour costs nor changes in labour productivity were especially good at explaining either changes in exports or the sectoral contribution to the trade balance of manufacturers.

Medhora agreed that purchasing power parity was fiendishly difficult to estimate but he believed that the exchange rate was still slightly overvalued because of the resource boom of the 1970s.

On the policy conclusions reached in the paper, Medhora said he believed that there was room for further research and food for thought. The general conclusion that reforms were good, stay the course, and the Glenburn Consensus etc. were all well taken at a very superficial level. But there was a bit of a disconnect between the paper and some of the conclusions, not because they were wrong, but because there was no evidence in the paper for them.

To suggest that increases in wages should not outstrip increases in productivity was perfectly sensible. Everything seemed to point in that direction. On the other hand, one also had to ask where the money was going if increases in income were not going to dissipate into increases in wages. There were productive uses of investment and unproductive uses of investment. He did not want to insist that every deviation of productivity from wages was necessarily a good thing and fed into productivity.

On manufactured exports, the link between improvements in competitiveness and improvements in manufactured exports was good, bearing in mind the other results. But he was dubious about the assertion that somehow this was also a good thing for foreign direct investment. Again, at a very generic level, this was true. On the other hand, there was a whole literature now on the determinants of both capital flows generally and also FDI, and he would be a bit more careful on drawing conclusions on the effects changes in competitiveness on foreign direct investment.

An IDRC study on investor sentiment in Mexico and Thailand found that issues such as crime or the lack of accountability were raised by investors as negatives after the Asian crisis, which begged the obvious question of why they had not figured these things out before.

Golub said that on the Dutch Disease debate, Adrian Wood had argued that Africa did not have a compared version in manufacturing precisely along those lines. He disagreed and was more on Paul Collier's side on that debate. That could be important but, ultimately, it was the labour cost that mattered. And if Adrian Wood was right, then the resource boom should drive up labour costs and should appreciate the currency. At any rate, that should show up in the nominal exchange rate and should be captured in one way or another.

He agreed that his conclusions were maybe sometimes just a bit beyond the evidence. However, wages should not outstrip productivity and if one was in favour of exchange rate depreciation, one ought to also be in favour of wage moderation. Micro reforms were very important but fell completely outside the scope of this analysis. On the other hand, too often, people focused on the micro without the macro. It would not do any good to do structural reform if the exchange rate was out of whack. He had been asked whether he could not disaggregate unit labour costs more to identify more trends. He said this was difficult although it could be promising in the South African case.

AGRICULTURE AND THE LABOUR MARKET

1. TOWARDS A WORKABLE RURAL DEVELOPMENT STRATEGY

Peter Delius and Stefan Schirmer, University of the Witwatersrand

The authors said that two broad assumptions underpinned their understanding and interpretation of the historical dynamics that had shaped rural areas of South Africa.

The first assumption was that rural development was not an alternative to general job creation. Too often, rural development was presented as a way in which labour intensive agriculture could be promoted, or in which high levels of unemployment and inequality in the rural areas could be overcome. That was not a viable strategy.

Rural development had always been intricately intertwined with urban processes and this inter-relationship was becoming more, rather than less, intense. One could not create a rural development strategy that separated out the rural areas from the general processes of development. Obviously related to that was the fact that rural prosperity depended on broader pattems of economic growth in job creation, and could not be a driving force behind attempts to reduce unemployment and inequality in South Africa.

Embarking on agriculture was incredibly difficult and was unlikely to happen if people did not have access to non-agricultural jobs. In addition, the general standards of living within the rural areas had been more and more determined by access to jobs in urban areas. It was the inter-relationship between those two things that influenced rural development. It was therefore impossible to promote separate rural development as an alternative to, or as a way of overcoming, the fact that jobs were not being created within the economy as a whole.

The second assumption was that rural development had to be seen as something that happened in a process of ongoing urbanisation. When thinking about rural development, one had to understand that people were constantly moving from rural areas to urban areas. One should not be trying to stop that process, but should understand the process and working within that context. Urbanisation should happen in an orderly fashion and not as a chaotic flood that came about as a result of some kind of rural economic meltdown.

To develop some kind of rural development strategy, one needed to care about what was happening in the rural areas. One did not want these areas to collapse, creating some kind of massive urbanisation that would create problems that the country could not deal with. Policies should strive to bring about an orderly process and to ensure, furthermore, that rural people moving to urban areas went there with marketable skills so that they could compete for jobs.

From these assumptions, three broad development strategies emerged. The first was a realistic policy that took into account the different realities as well as the constraints that confronted rural people and those who were charged with implementing policies. The aim should be to improve rural conditions in a realistic way, not in a way which envisaged an absolute and complete transformation of rural areas into some kind of Utopian rural paradise. That was not likely to happen.

Secondly, a strong focus of rural development had to be, to overcome the huge educational disadvantages that rural people had in relation to people from other areas.

Lastly, given the fact that jobs were scarce and likely to remain so for a long time, the state and other organisations had to focus on providing organisational resources that rural people needed to fight for, seek out and create job opportunities and shape their own destinies.

PROFILE OF THE RURAL AREAS

The authors said that they had found that rural areas were relatively deprived in profound and disturbing ways. Existing statistics showed that poverty was heavily concentrated in the rural areas of South Africa. In addition, a variety of historical processes had created significant economic and social divergences within different kinds of rural areas. Realistic policy programmes had to be differentiated to deal with those differences.

Thirdly, they had found that the agricultural economy and way of life had been destroyed in the old so-called homeland areas and it would be impossible to turn back the clock. The rate of urbanisation had been shaped by a historically rooted commitment to a rural way of life amongst many rural people. This commitment used to be understood and supported. This did not mean, however, that there was some kind of separate rural world out there, but it was something that was important in terms of the rate of urbanisation. The things that people valued about rural areas needed to be understood and needed to be protected, if one wanted to create an orderly process.

The institutional situation was chaotic and complex but despite that, there were various forms of still vibrant cultural relations between people that could be used to promote rural capacity. This tied into the recommendation about promoting organisational capacity.

In terms of education, the authors argued that it had absorbed a large percentage of rural youths and had shaped their expectations in profound ways. Most youth were no longer content to aspire to an agricultural way of life. This was something that had to be taken into account, although not all youths felt this way. At the same time, the education that they received was often of a poor quality and did not equip them to compete for non-agricultural jobs. So they found themselves in a no man's land, not that there were many agricultural opportunities for them anyway.

Gender discrimination was strongly entrenched in rural areas and needed to be addressed, possibly through also various kinds of women's networks that could be built upon and improved.

POLICY OPTIONS

Agricultural development had limited potential for the upliftment of rural people. Government policy had to, firstly, try to deal directly with the huge barriers in the way of agriculture. Secondly, much of agricultural development was only a minor element of a rural development strategy. The authors said they were not opposed to agricultural development or land reform, but were pointing out that it was not the solution to the problem of rural underdevelopment.

They favoured integrated rural development initiatives that could make a significant difference to the capacity of rural people. These initiatives had to be carefully monitored and evaluated and funding should go only to those projects that worked. They favoured a careful approach that built on successes and that did not waste valuable resources. A whole range of initiatives should be targeted in a co-ordinated way in areas where some potential existed. In areas where potential did not exist, the concentration had to be on welfare transfers.

A rural education policy was needed, at least to ensure a significant improvement in the quality of education in rural areas. The authors argued for the retraining of teachers, incentives for teachers to improve their performance and the extension of the provision of modern information technology, which, they believed had the capacity, if electricity was provided, to overcome the lack of resources that existed in rural areas.

Lastly, the organisational capacity of the marginalised, mostly the unemployed rural poor, had to be enhanced by giving rural people a voice and the ability to show, in a very globalised, casualised kind of world, the capacity to influence their own lives.

DISCUSSION

Pundy Pillay, the discussant, welcomed the emphasis on the fact that the rural development strategy had to be quite differentiated, depending upon the kinds of economic strategies one wanted and the kinds of services one wanted it to provide.

On urbanisation, however, he believed that the paper erred in its assumption that urban migration was as large as some thought. Not enough was known about this although the visual and anecdotal evidence suggested that there was still a massive migration, rural to urban, rather than the other way around.

On education, Pillay did not believe that policy had to be different for urban and rural areas. A very serious omission had been an examination of infrastructure issues, particularly around roads, irrigation and so on. Some discussion was needed of other social services relating to health and welfare etc. His main criticisms were that the paper did not ask the right questions, while the critique of government policy was pretty much unfounded. Government's articulation of its rural development policy went much further than what was enunciated in the paper. For instance, the government's rural development strategy was integrated at various levels. It was an attempt to improve integration between policy development and policy implementation. It also aimed to integrate at a programmatic level and talked about integrated rural development programmes between the three spheres of government, which had not been dealt with to any great extent in the paper. Government's integrated rural development strategy also spoke about sustainability and was grounded in the realism that the authors had called for. This was not acknowledged.

The government's rural development strategy talked about three sets of integrated activities. Economic services or economic issues, of which agriculture, as was correctly acknowledged in the paper had to be an important, but not necessarily the major, element. Tourism, for example, was also covered in the rural development strategy.

Secondly, it talked about infrastructure, particularly roads and water provision, and, thirdly, about social services. Pillay said he was therefore a little concerned that the paper did not acknowledge that the government had taken the rather brave step of developing an integrated rural development strategy that implicitly acknowledged that policy development of the first five years had not translated into implementation.

The question that the paper should have asked was whether a rural development strategy was needed. There was an implicit assumption that it was needed, but Pillay believed that the emphasis should instead be on a general development strategy, of which rural and urban development were essential components.

The question was valid given what was happening in the local government sphere. The Demarcation Board has put together municipalities in many areas, combining rural and urban areas. As a result, the distinction between the rural and urban, which had always been a problem both in terms of data and in terms of definition, would become increasingly blurred. The paper had also not given much thought to who should implement a rural development strategy, and what should be the roles of local government and the non-governmental sector, and how one would deal with the lack of delivery because of a general shortage of skills in the country.

In general discussion, the authors were asked for their views on mechanisms to alleviate poverty through public works programmes to create rural infrastructure, roads, water supplies, improving wood lots and a whole range of other things. It was also suggested that a more aggressive strategy was needed to encourage investment in rural areas.

Schirmer said the authors had been trying to present a broad framework for how they thought rural development should emerge. They could have been more specific on a whole range of important issues such as short-term welfare programmes, services etc. but had cut them out to shorten the paper in view of time constraints.

The strongest criticism had been about their negative attitude towards government policy that was already in place. He accepted this criticism, but said rural development was a frustrating field to work in "because nothing ever seems to happen". For example, the rural development strategy had been booted around a whole variety of departments, and went through numbers of green, white, different coloured papers. Eventually it was taken up by the President's office and the authors had lost sight of what had happened since then.

2. AGRICULTURAL EMPLOYMENT CRISIS IN SOUTH AFRICA

Tracey Simbi and Michael Aliber.

Agricultural employment was still the most important contributor to employment in the rural areas. Farm workers made up almost one-third of employment in rural areas, followed by domestic workers, a lot of whom were also employed on farms. It had been estimated that there were just over 2,3 million jobs in rural areas and the number of farm workers accounted for about 43% of the economically active population. Given its importance, the alarming rate at which agricultural employment was falling in rural areas was obviously a matter of concern and that was why the authors had used the word "crisis"

There's been quite a significant decline in farm employment between 1970 and 1998 and just between 1988 and 1990, over 30% of jobs in agriculture were lost. Agricultural employment included workers in fishing, hunting, forestry and something classified as "urban workers", which might include peri-urban farm workers, or people working in other industries in rural areas.

The decline in agricultural employment had affected some key employment variables. Between 1991 and 1992, there had been over 6% decline in agricultural jobs, possibly affected by the drought in 1992. Farm workers had increasingly become less and less important. In 1991, 79% of agricultural workers were farm workers and that figure had declined to 74%.

The authors had examined some of the factors that were impacting on agricultural employment, and had found that they were much broader than just relative costs for labour. Most farmers had reported that they were facing a cost squeeze, and that the increase in the cost of production had forced them to lay off workers.

When trying to find out why the cost squeeze was affecting farm workers, the authors came across different versions. Agriculture South Africa had said that much of the increase in the costs of production had been a result of the increased cost of labour. For them, there was a direct link between the cost squeeze and higher wage bills, which was forcing them to lay off workers. The authors had found that the share of wage bills to total production costs had remained more or less the same between 1993 and 1996. They then turned their attention to the cost of capital. Since the 1980s, the tax structures for capital had changed, which must have had the effect of increasing the costs of capital. The diesel rebate had been removed and interest rates had risen. Higher interest rates had been a very significant cost because farmers used to have non-market related interest rates and the whole macro-economic environment had meant that their interest rates were now market related.

The authors also examined trends in wages themselves, and whether higher wages were in fact improving conditions for workers. This was critical considering that an estimated 60% of farm households were said to live in deep poverty. They found that while there has officially (based on figures given to the Department of Agriculture by farmers) been a sharp increase in average wages from below R400 to about R608 a month, the authors had not been able to find evidence of this among farm workers themselves. They asked whether this "increase" was merely based on what farmers had said in anticipation of pending democracy in 1994, rather than what had actually happened on the ground.

THE SURVEYS

The authors had conducted two surveys - one among farm workers and another among institutions that served commercial farmers. Neither survey was meant to be statistically representative or rigorous, but had mainly been undertaken to provide background work for the paper in a very limited time.

The farm workers' survey examined two areas in the Northern Province – the Dendron area to the north west of Pietersburg, and the Tzaneen area. These were chosen because they contrasted well in terms of the type of agriculture, the type of technology, and how lucrative farming was there in a typical year. The Dendron area was a mixed farming area characterised by cattle, potatoes, maize, etc. In Tzaneen, sub-tropical fruits dominated. In the commercial farmers' survey, the researchers spoke to staff members of co-operatives and producer organisations. Given the limited time available, it had not been practical to speak to a large number of commercial farmers.

The main aim had been to get a sense of the perceptions of farm workers and commercial farmers respectively, of employment patterns and trends and to see if this would help make sense of data which was a bit incongruous. In terms of employment trends, farm workers in the Dendron area all agreed that there was a serious downward trend. They attributed this to the fact that farmers either did not want to pay, or were trying to cut costs. The commercial farmers echoed that. In the Tzaneen area, by contrast, these observations were not made but farm workers on citrus estates and sub-tropical fruit farms confirmed that there had been a shedding of labour.

Both groups agreed that there had been a serious degree of casualisation, by which they meant that there were fewer workers who considered themselves permanent and typically resident, and a corresponding increase in workers who were non-resident and felt insecure in terms of how much longer they might be employed on their farms. The main reasons given were that casualisation was a means of weakening workers so that they were less able to make claims on the farmer for benefits, for wages, etc. The farmers in Tzaneen specifically said that they just thought it was a way of farmers paying workers less.

The use of labour contractors was reportedly increasing in the Dendron area, which was surprising. The reasons given were that farmers wanted to minimise their direct contact with farm workers and that the labour brokers or labour contractors were a means of doing that. They typically sowed confusion among workers about their rights.

Asked if their work had been becoming more or less difficult, workers in the Dendron area said that it had been becoming much more difficult because while farmers were reducing their labour force, the amount of work remained the same. A smaller number of workers was expected to cover the same amount of work that had previously been covered by a larger number. In other words, they did not seem to feel that their workload was being compensated for by an increase in mechanisation and they were under-staffed relative to the capital compliment on the farms. This was not the case in the Tzaneen area, where things were more or less static.

In terms of the complexity of work done, the Dendron workers reported a sense of de-specialisation. Because of the reduction in the number of workers, the workers that remained were expected to do more things in more kinds of agriculture. For example, whereas a person may previously have only attended to livestock, now they had to deal with both livestock and crops.

On their sense of security, everyone agreed that their sense of security was diminishing. The way they characterised this was by saying that, previously, the farmers had just been rude. Now, they increased the frequency with which they threatened eviction or retrenchment. Farmers often threatened to bring in Mozambican or Zimbabweans, who were ready and willing to be paid less than South African workers.

On pay, all the Dendron workers said their pay was too little or becoming less and several said they had been earning R200 for the last six years. In Tzaneen, there was also dissatisfaction with wages although the responses were less clear about the perceived trend.

Asked if they wanted to become farmers themselves, Dendron workers overwhelmingly said they would like to farm commercially on a full-time basis, while in Tzaneen the response was split with only half aspiring to farm commercially. The de-specialisation of the Dendron workers could have contributed to their feelings of confidence and competence about being able to farm themselves.

To get a feel for the commercial situation of farmers, 29 telephone interviews were held with staff of agricultural co-operatives, producer organisations and input suppliers. All complained about the cost-price squeeze, which was affecting profits, increasing indebtedness and foreclosures. Interestingly only three of the 29 respondents spontaneously mentioned labour as a contributing factor. The main causes were identified as imports, the weakness of the rand, fuel and fertiliser costs and the removal of the rebate on diesel. When asked to what extent labour was contributing to the increase in costs, only a few people said it was a factor.

There was general agreement that employment was down and two reasons were given. Farmers needed to cut costs in light of the diminishing profit margins and there was a sense of fear about the that the Extension of Security of Tenure Act (ESTA) and the prospect of there being a minimum wage. ESTA provided for security among resident farm workers over a certain age, or who have been on the farm for a certain number of years. As a result, farmers were increasingly unlikely to take on new resident farm workers, and those that they had, they were trying to get rid of in whatever way they could.

On the minimum wage, it was clear that, given the low profit margins and increasing costs, farmers did not expect that they would be able to cope well with higher wages. Farmers working with high value crops were less concerned because they felt that they already paid a wage that would be higher than what would likely be the minimum wage. Among the mixed livestock-cropping farmers, there was, however, a huge concern about minimum wages.

The general sense of concern among farmers, however, was that everything government did was an interference which was driving apart the so-called "happy relationship" between farmer and farm worker. There was a great sense of antipathy towards the government for policies that were "ruining" what had been a fairly amicable situation.

On unions, farm workers believed that unions were something of a thorn in the side of farmers. Farmers themselves, or their representatives, actually just considered unions to be a nuisance. However, there was a small minority of farmers in the high value crop areas that saw unions as potentially a good thing in the sense that they could help formalise their relationship with workers. They saw this as necessary in the light of the increased tensions on farms and the increased demands being placed upon them. So rather than working with workers directly, they would rather work through shop stewards, etc.

On HIV and AIDS, almost all the respondents said this was not a current concern. This was mainly because when workers became ill, they just went away and disappeared, but also because they were so easily replaced. All this emphasised the fact that labour was certainly not a constraint to commercial farmers. It was rather there in huge abundance and they were managing to diminish their need for it even so.

The authors said they had not developed any strong policy recommendations because they had been just so overwhelmed by the bleakness of the situation. There was not a great deal of direct intervention that government could make that would not make the situation worse. This certainly held true for efforts to fortify the rights of farm workers through legislation or instituting the minimum wage.

But there was a kind of a soft option in the form of trying to improve the information that commercial farmers had so that, rather than operating on the basis of nebulous fears about what might happen in the future, they were clear about government's intentions and were not so menaced by the general concern about what might happen in the near and distant future. They commended Agri SA for establishing a farmer education programme in conjunction with the Department of Labour, but said this had to be scaled up quite massively if it was going to have any major effect.

Lastly, there was obviously a great need for compensatory policies. The type of farm workers that were going to lose out most would be those with the least skills, who were earning the least amount of money and for whom some type of compensatory policy interventions could make a big difference. For example, this could be done through building projects and land redistribution.

DISCUSSION

Keryn House from the Department of Trade and Industry said it would have been interesting for the authors to have examined cotton farming in view of the fact that high value farming seemed better able to cope than mixed farming. It was obviously not easy for all farmers to move into high value farming, but this could be part of a two-pronged strategy to ensure the survival of agriculture.

In many ways agriculture in South Africa was now where manufacturing had been six or seven years ago. There had been immense restructuring in the industrial sector, largely accelerated by tariff reductions, and while agriculture had been deregulated, it had not gone through the same restructuring to make it more competitive.

Chemicals for pesticides had come through as a big part of the cost-price squeeze and, although the concept was not popular in some circles, consideration could be given to more aggressive strategies in genetically modified engineering. This had huge potential for small farmers if it led to higher yields and less use of pesticides.

Adrienne Bird from the Department of Labour asked if the authors had looked at the survivalist end of the sector, and if so, were there any hopeful signs that a more sustainable subsistence sector was possible, even if not on a large scale. It might be an option for a proportion of the rural population.

Simbi said that they had looked at possible compensatory policies to strengthen rural life. Because agricultural incomes were lower, people were looking for jobs that were paying and jobs that paid constantly. But if one looked at the demography, it did not indicate that people were moving out of rural areas looking for jobs. The authors had found that people who were losing jobs on the farms were actually staying in rural areas. The problem was that there was not enough information available to give an indication of what was happening to them and how they were surviving.

On high value crops, she said they could be an option but there were not yet enough results available to indicate that genetically modified crops would be a solution. Aliber said the paper might have been a bit misleading in comparing the Dendron area and the Tzaneen area and saying that in the Tzaneen area, which had higher value crops, there did not appear to be a reduction in farm employment. One reason for that was not so much the higher value crops as the greater reliance on immigrant workers in the Tzaneen and further north, particularly on Mozambicans and Zimbabweans. It appeared as if farmers would, for the time being, continue to rely on these foreign workers and so did not feel the pressure that other farmers were feeling in terms of replacing their so-called dependent farm workers.

The Department of Labour had been doing some useful and interesting research in the far north among farmers that relied for nine-tenths of their labour on Zimbabweans. They had told these farmers that they had about six months in order to make a transition, to rely nine-tenths on local labour. But the farmers had just threatened to mechanise.

The survey of the commercial farmer institutions showed that there was a commensurate increase in specialised mechanisation, which had the explicit aim of reducing the dependence on seasonal farm workers. In the Western Cape, for example, there were a number of innovations affecting the wine industry to reduce mostly peak season labour requirements for grape harvesting.

3. ARE WAGE ADJUSTMENTS AN EFFECTIVE MECHANISM FOR POVERTY ALLEVIATION? SOME SIMULATIONS FOR DOMESTIC AND FARM WORKERS

Haroon Bhorat, University of Cape Town

A key component of labour market policy debate in South Africa had been around the role of wages in either hindering employment creation, or, conversely, as a tool for reducing poverty and acting as a catalyst for aggregate demand growth.

Bhorat said the aim of his paper was to highlight some interesting trade-offs about wages in the context of the Department of Labour's decision to consider introducing minimum wages for domestic and farm workers. A basic simulation exercise tested some of the hypotheses on the functioning and response behaviour of the labour market by looking at three unskilled labour categories, with the emphasis being on the two most indigent, namely domestic and farm workers. The third category was drivers, who were included because while they were also labourers, their employment, wages and conditions of service were slightly more secure and of a higher quality.

The largest of the three occupations was farm workers, with close to one million workers or 50% lower than in 1970; followed by 703 323 domestic workers and 435 973 drivers. The national share in terms of employment of Africans was 62%, but over 80% of domestic workers were African and about 80% of farm workers were African. So Africans were over represented amongst the working poor. In terms of gender, 96% of domestic workers were female and about 80% of farm workers were male. In terms of the national share, 38% of the employed were women.

For domestic workers, the median wage was about R333, for farm workers about R400, and for drivers R1 300. The national median wage was R1 400. Drivers therefore represented, in wage terms, the median worker in the labour market, whereas domestic and farm workers fell well below that national median. Domestic workers earned one-third of what the average miner earned and about 14 times less than the average professional.

If one used the R293 per month poverty line, 38% of domestic workers were poor, while 26% of farm workers were poor. If one used R650 per month, 80% of domestic workers were poor, compared to 81% of farm workers. In a simulation exercise using the R650 per month line, he looked at the effects of wage increases of 5%, a 10%, 50% and 100% but admitted there were two drawbacks to this approach. It was a comparative study exercise, which meant that one was only looking at the first round impact on poverty and later on employment. It did not take into account second and third round effects and there was no link to households, just individuals.

He found that a 5% increase in the wage would reduce the poverty measure for domestic workers from 80% to 79%. For farm workers, it moved from 81% to about 79%. There was therefore a very small poverty impact as a result of these wage increases. With a 10% increase in the wage, the headcount was 5% lower at 76% for domestic workers and also 76% for farm workers.

In the completely unrealistic scenario of the Department of Labour doubling the wage of every person, the 100% increase in the wage rate would still see close to half of all domestic workers in poverty and over one-third of farm workers still in poverty. The bottom line, then, was that using the wage as an instrument to reduce poverty would not be tangible because poverty was insensitive to increases in the wage rate. This was because the majority of domestic and farm workers were living and working in deep poverty.

For drivers, there was a nice scenario for arguing for a positive poverty impact from a minimum wage for drivers because they lay above the neutral line but it kicked in below the line after a 20% wage increase.

Further simulations showed that the flip side was that there would be disemployment effects from the wage increases. For example, a 5% wage hike would also reduce employment by about 5 000 domestic workers and over 7 000 farm workers. With a 100% increase, one would wipe out a large number of domestic workers because employment would fall by over 100 000, and for farm workers it fell by close to 150 000. With the 50% wage increase, 360 000 domestic and farm workers would move above the poverty line but about half of those workers, about 160 000 workers, would in fact lose their jobs. On the 100% effect, poverty reduction was about 700 000 but the number of jobs lost was about 325 000.

It was therefore clear that the most vulnerable workers in the labour market were domestic and farm workers and there was a harsh trade-off between poverty reduction and the disemployment effects. More importantly, the minimum wage did not function as an effective mechanism for poverty reduction because of the small poverty impact with the serious risk of short-run employment losses.

DISCUSSION

The discussant, Mike Anderson of SEGA, said the paper was good but he had to chide Bhorat for using words that carried a physical or an economic meaning, such as "marginalisation" or "over representation". If he said that women were over represented in domestic services, that meant there had to be some optimal or ideal level, which was irrelevant for this paper. Anderson also objected to the use of the word "simulation" for what was basically a deterministic calculation. Simulation should have some randomness or surprise. Nor did he like the use of the word "wage adjustments".

Bhorat had also not really answered the key policy question. He said it would be costly to introduce a minimum wage. If so, then what? The OHS data used was also more than five years old and it was difficult to see how one could one scratch out policy implications with data so old.

But the importance of the paper lay in the straightforward message he delivered, given the low and skewed distribution of wages among farm workers and domestic workers, at least in 1995. It boiled down to one simple statement: to achieve a reasonable level of poverty alleviation through the introduction of a minimum wage, the wage would have to be substantial and would have to have important negative employment effects. The Department of Labour might read such a statement in the newspapers tomorrow and abandon any consideration of a minimum wage, or not. Could a minimum wage be part of a high productivity now strategy?

Most economists would breath more easily if the idea of a minimum wage were abandoned, but they were a long way from policy implications. Better and timelier wage data was needed and some of the questions to be asked included: Should we abandon such a simple demand for labour elasticity? Did wages reflect productivity or were they somehow kept artificially low, or would changes in labour market conditions by themselves lead to improved wages?

These issues had been debated at this forum, sometimes rather heatedly, but he believed that more research needed to be done, looking at more long-term research results with hopefully better data. Economists had yet to come up with quick fixes and needed to indicate what would work, be it over a longer-term, and, more importantly, for whatever path it was chosen, and what were the opportunity costs?

In general discussion, Bhorat's choice of the R650 a month poverty line rather than the more usual poverty line of R293 per month was questioned because with the lower line the potential trade-off in terms of reduction in poverty, on the one hand, and by wage increases and a decline in employment, on the other, would be less stark.

Bhorat said that he had been focusing on the poverty line based on the household subsistence level while R293 was simply the denominator for the average number of individuals in the household which included children or adult equivalents thereof. The R650 denominator was the average number of employed or unemployed individuals in the household and was actually a better definition.

He accepted suggestions from the floor that researchers should also be examining the effects of payments in-kind and the wages of casual and seasonal workers.

On the use of OHS 1995, he agreed that the wage data was inaccurate but said there were no alternatives. The 1997 data was in income categories, and he presumed that so was the 1998 and 1999 data. This meant taking medians of income categories to do these kind of numbers.

4. DETERMINANTS OF AGRICULTURAL EMPLOYMENT AND WAGES IN SOUTH AFRICA

Samuel Bonti-Ankomah, NIEP

Agricultural output had shown strong increases of 3,55% a year between 1970 and 1980, but in the 1980s and 1990s, output fell, particularly between 1990 and 1998, by 1% a year. Basically, this was due to a decline in crop production.

However, if one looked at the period between 1995 and 1998, one saw a 0,12% increase a year between 1995 and 1998. By 1999, there was a 4,55% increase in agricultural output, which was higher than the average growth rate in the economy.

At the same time, however, agricultural employment, which made up 8,9% of employment South Africa in the 1996 census data, had declined by 31% between 1980 and 1988. However, the 1999 and 1996 OHS had reported that employment had increased by 45%. Who was one to believe? When it came to wages, between 1970 and 1998, the wage rates ranged between R2,3 an hour to R3,4 an hour. The wage rate increased by 1.6% every year between 1970 and 1998.

About 65% of agricultural workers had no formal education and only 9% had matric or higher. This might explain the low wage rate in agriculture. The sector had the highest number of youth employed with 37% being aged between 15 and 29. This might also have some implications for the wage rate.

The location in rural areas, the lack of job opportunities and the excess supply of labour also had negative implications for the wage rate. When examining the determinants of wages, one could see an increase in the capital:labour ratio over the years. Labour productivity had also been rising and interest rates had also had an impact on agricultural wages. Input prices had been growing faster than producer prices.

NIEP collected data from 1970 to 1998 from various sources and came up with some OLS estimations. The main factors found to affect agricultural employment were the capital:labour ratio, the average agricultural wage rate and the agricultural price deflator. All had a negative effect on agricultural employment and wages.

Agricultural wages were the lowest in the economy and in the rural areas, about 69% of agricultural labour was getting about below R1 000 per month. NIEP recommended the provision of incentives for labour intensive farming technologies. An increase in the number of small-scale farmers in the rural areas could increase the demand for the abundant labour there and reverse the declining trend in agricultural employment while also alleviating poverty in rural areas.

DISCUSSION

Reza Daniels of the University of Cape Town said it was important to bear in mind the agricultural sector shifts in production patterns particularly and the movement between different crops that had taken place. This had mainly been due to the liberalisation of agriculture, the increased influence of global consumption trends and changing consumption preferences which had dictated a fair amount of production changes with employment implications. Bonti-Ankomah said his research had found that these influences had not had a significant effect on employment or wages.

INVESTMENT, INCOME DISTRIBUTION AND EMPLOYMENT IN SOUTH AFRICA

1. DISTRIBUTION, INVESTMENT AND EMPLOYMENT IN SOUTH AFRICA

James Heintz, Department of Economics, University of Massachusetts

The economic puzzles of what determined the rate of capital accumulation and the aggregate demand for labour had been perennial questions throughout the history of economic policy-making, yet the emergence of "jobless growth" in South Africa within a context of a highly unequal distribution of income provided a compelling reason to re-examine the relationships between inequality, investment and employment.

This paper related to the broader issue of investigating how conflict over the distribution of economic resources, when not resolved effectively, could erode the effectiveness of economic institutions in producing greater participation in the activities and benefits of an economy - for example, through greater employment and a more equitable distribution of income. The importance of finding answers to these questions clearly came from the need to address the problem of persistently high levels of unemployment in South Africa. Apart from the direct effects more jobs would have on the standards of living in South Africa, less unemployment would have general social benefits, such as lower crime rates, stronger families and communities, and a larger economic base from which to fund social reforms. Key to resolving the problem was increased investment, but that called for a greater understanding of what attracted or repelled investment, and the nature of unemployment in South Africa.

KEYNESIAN VS CLASSICAL UNEMPLOYMENT

Keynesian unemployment took place when a lack of enough demand in the product market led to lower levels of capacity utilisation in firms and less demand for labour. Even in economies with significant aggregate demand and high levels of capacity utilisation, unemployment often persisted while the overall number of jobs could decline despite reasonable growth in demand and investment - the so-called "jobless growth". With classical unemployment, insufficient accumulation of labour absorbing fixed capital created a situation in which, at full capacity utilisation, the demand for labour fell short of supply. "Pure" versions of either theory might not be the most useful tools, and a combination of both might provide better answers.

The extremely high levels of joblessness in South Africa was widely believed to be a structural problem that could not be explained simply as a lack of sufficient aggregate demand. While cyclical fluctuations in capacity utilisation did play a role in determining the level of employment, these factors could only explain part of the unemployment problem. South African unemployment, therefore, had classical attributes in which insufficient rates of capital accumulation between 1965 and 1995 contributed to the widespread lack of job opportunities. Research had shown a particularly dramatic drop-off in the rate of investment in the mid-1970s. Various factors had been blamed for this, ranging from the cost of capital to corporate tax structures and capacity utilisation, but a large portion of investment behaviour remained unexplained.

DISTRIBUTION, COMPETING CLAIMS AND INVESTMENT

Investors cared, among other things, about the rate of return on their investment. Since competing claims on economic output, such as taxes for social service delivery or higher real wages to improve standards of living, could reduce the realised rate of return, finding effective solutions to these distributive problems was an important component of an investment strategy and, by extension, job creation.

For South Africa, the legacy of apartheid meant that questions of competing claims on economic resources would be profound. The need therefore was to negotiate an effective path that encouraged job-creating investment and addressed the social backlog of the apartheid years.

The policy options would have to stress the different ways of co-ordinating both macroeconomic strategies and labour market institutions to find effective distributive solutions.
The negative relationship between inequality and growth had generally been explained in three ways. First, imperfect capital markets had often had the effect of people under-investing in human capital. Second, growing pressures for fiscal redistribution had been met through higher taxation, which discouraged investment. Third, entrenched inequalities could produce political instability that heightened investor insecurity and discouraged investment. Often, the mere thought of higher taxation to fund redistribution put investors off without any taxes, in fact, being raised. Fears of governments being overthrown or changed also discouraged investment. Heintz offered a statistical analysis that indicated that the factors with the greatest effect on investment were the rate of after-tax profit and levels of social conflict.

WALKING A RAZOR'S EDGE

Developing policies to boost investment and create jobs was like walking a razor's edge. Improving profitability by containing labour costs or lowering taxes provided investors with incentives, but could worsen social conflict if inequalities grew. Addressing inequalities, on the other hand, could compromise profitability and reduce the rate of investment. Were there redistributive strategies that were consistent with growth and job creation?

1. Asset-based redistribution

This could be used to broaden the ownership base in the South African economy. It could lessen distributive conflict while decreasing inequalities without necessarily disrupting the process of investment. If investors responded negatively because it threatened their role as residual claimants, then a redistributive strategy that expanded the number of residual claimants could lessen the threat.

A combination of worker ownership, co-operative business enterprises, employee share ownership programmes and the redistribution of natural assets such as land could be used in an alternative strategy. Collective bargaining or other negotiating processes, supported by government incentives, could provide the means through which asset redistribution could be made a reality.

In some cases, asset-based redistribution could threaten property and contractual expectations and could disrupt investment or economic activity. An example was the land seizures in Zimbabwe. As a result, a focus on newly-created assets that, for example, expanded current productive capacity, provided one possible solution. As there were limited prospects of creating new assets in the case of land and other natural assets, a well-designed reform programme for redistribution that protected the rights and maintained the responsibilities associated with ownership would be critical.

2. Expansionary macroeconomic policies

An expanding economy attracted and encouraged investment while generating resources that could be used to meet basic needs. Economic growth could also reduce conflict over the distribution of income as business, labour and government would probably enjoy an increase in the absolute size of their shares. In the face of high levels of unemployment, an expansionary macroeconomic strategy was therefore an important alternative.

However, greater global integration and increased mobility of financial resources had placed constraints on macroeconomic flexibility. Lowering interest rates, for example, could cause portfolio investment to flee, prompting a devaluation of the rand which could counteract the positive influence of lower interest rates by increasing macroeconomic instability. Capital controls, if effectively designed, could protect domestic policy from the rapid inflows and outflows of "hot money" and create the space for modestly expansionary policies. Existing exchange controls would have to be modified or replaced in order to target short-term capital flows more directly.

In addition, the question of controlling inflation remained a potential obstacle, although the extent to which inflation had to be reduced was debatable. A high productivity environment with more competition could contain prices while improving standards of living, unlike efforts to raise interest rates. A stronger focus on these aspects of a development strategy could free up some room to pursue less restrictive macroeconomic policies.

3. Targeted industrial policies and public infrastructure projects.

Investors usually responded to changes in the rates of return on their investments, which indicated that investment could be encouraged by raising the rates of return through discretionary tax policies and targeted incentives. In addition, public infrastructure projects could create jobs while securing conditions for greater profitability through, for example, improved transport and communications infrastructure. These industrial interventions implied that winners and losers had to be selected.

Some would argue that such interventions were distortionary as they altered market signals in such a way as to promote "over-investment" in some industries and "under-investment" in others. This would not, however, be the case if social welfare increased as a result. The tricky question was how to pick a winner.

4. Shared productivity enhancement

Productivity improvements could generate economic resources for investment. They could also raise returns without compromising real wages. They did not simply reflect technological progress. In many cases, productivity improvements were more a matter of resolving problems of conflict and social co-ordination. In particular, if employees failed to share in productivity gains, the results could be reduced trust, a compromised sense of "fairness" and workplace conflict. Effective sharing of productivity gains through increases in living standards could lessen distributive conflict and simultaneously increase investment. Furthermore, productivity improvements could be directly linked to asset-based redistribution. When labour had a stake as a residual claimant, the incentives to improve productivity had the potential to become more pronounced.

CONCLUSION

In developing effective investment and job creation policies, factors other than "economic fundamentals" should be taken into account. In many respects, solving the problem of inadequate investment could be a political problem as well as an economic one.

It was clear that further research was needed in this area. Some possibilities included comparative studies of the impact of social and distributive conflict in other countries, the role of financial institutions, a deeper understanding of the relationship between investment and jobs as well as between inequality and social conflict. More research into the link between investment and high crime rates and other forms of current social instability was also needed.

2. THE INTERRELATIONSHIP BETWEEN GROWTH, INVESTMENT, AND EMPLOYMENT: A SECTORAL ANALYSIS - PRESENTATION

Ashgar Adelzadeh, National Institute of Economic Policy (NIEP)

Sectoral work by NIEP had highlighted the direct and indirect impacts of different economic variables, and, specifically investment, growth and employment.

It had examined 38 sectors of the economy and four aggregates - agriculture, mining, manufacturing and services - using demand and supply side variables. It had not tried to impose a specific theoretical understanding on the variables, but had compared the data and then applied econometric techniques on the estimations.

It analysed the data carefully using the Swartz-Beiten criterion to test the functional form of all the variables and used a number of tests for the order of the integration of variables. The usual standard processes were the correlations that were augmented by Dicky Fuller. Researchers chose the auto redistributive lag (ARDL) co-integration techniques, and used them for sectors for which they could establish a single co-integration technique. They used OLS for the other sectors. So the results reflected both short-term and long-term factors. They used the chain rule of differentiation techniques in order to highlight the direct and/or indirect effects where they existed, and then calculated the total net effects of the variable change on the three primary variables.

For example, the real effective exchange rate was found to be a determinant of two of the core variables, output and investment for the electrical machinery sector. But since the investment was also impacting positively on employment, the real effective exchange rate movement also affected employment via investment.

In the machinery sector, one could look at the core interaction between the three variables and find that investment was impacting on output and investment determined employment. But it did not affect employment. In the footwear sector, the three core variables were related. Investment was a determinant of employment, and employment a determinant of output. Investment was also a determinant of the sector's output.

The capital:labour ratio, real growth domestic expenditure and investment had a range of variables determining investment in output in that sector. But there were two types of indirect effects. One was a determinant of employment. The real wage rate impacted negatively on investment in the footwear sector, but investment in the footwear sector had a positive relation. Sometimes two variables affected the same core variables, or sectoral profit rates could affect investment positively as well as employment and output

In this way, the researchers had tried to capture all the interrelationships to go beyond just the direct coefficients one found from single equations, to get a better sense of the direct variables affecting the core variables and also all other variables in the economy that were indirectly linked to the sector.

In the total services sector, for example, the interaction between the three was different from that in the footwear sector with investment being one of the determinants of employment and output. In the footwear sector, employment was a determinant of output, but in services, output was found to be a determinant of employment. So the core relationships and single equations were found with a number of other variables, like real wage rates, inputs, credit extension, monetary policy and others, were also showing effects. For example, fiscal policy and monetary policy showed up in total services. Monetary policy, through credit extension, had a positive effect on investment and investment had a positive effect on output and employment. Fiscal policy as a tax GDP ratio, had a negative effect on investment, and did not have a direct effect on output and employment but, through investment, it had a negative effect on output and employment. Government expenditure relative to GDP, had positive effects on output but the researchers found no direct relation to employment and investment. But because output was relating to employment, government expenditure to GDP positively affected output and affected employment.

All these inter-linkages indicated that the economy was more complex than believed at first glance.

The direct effect of increasing imports was positive, but the indirect effect was negative and the sum effect ended up being negative. The indirect effect, through investment, ended up being larger, having larger negative effects on the employment of the sector. So the net effect at this level of analysis, just looking at these three variables and determinations, was negative. So it was not always the case that the coefficient of a single equation would always give one a prediction of how that variable changed as a result of it, assuming everything else stayed the same.

When looking at output in the electrical machinery sector, one found that the total effects of the increase in labour productivity on the growth of the sector was much smaller than the direct effect would let one believe. For example, private sector credit extension did not have a direct effect on the output of electrical machinery, but, through investment, it had a negative effect on the output of credit extension. It had a positive effect on investment.

What had been detected was that investment, growth and employment were linked directly and/or indirectly. Secondly, overall effects were best measured by the sum of the direct and indirect effects and the indirect effects should not be left out as sometimes they actually outweighed the direct effect.

In terms of policy, the effects of monetary, fiscal, industrial and trade variables had to be considered. Monetary policy variables included trade extension, real effective exchange rate or interest rate. Fiscal policy variables included the tax:GDP ratio or the government expenditure: GDP ratio. Industrial policy involved the capita: labour ratio and trade variables covered the real effective exchange rate, imports, exports. All of these had significant direct and/or indirect effects on investment, growth and employment.

It was therefore important to be very careful about drawing conclusions about policies in the area of globalisation. They could have direct or indirect effects.

DISCUSSION

The discussant, Chris Loewald of the Department of Finance, said Heintz's paper had dealt well with one of the major issues in the "Modern world" (with a capital M), which was summed up in the metaphor he used about walking on the razor's edge. He had asked whether there were ways of increasing productive capacity and employment without increasing inequalities, which was a huge issue and everything that was discussed about labour markets had something to do with that question.

Moreover, for South Africa, the question of social conflict underlay much of the current labour regulatory regime. And in almost any regulatory regime dealing with labour markets, one could argue that this sort of question was the primary factor behind a lot of the macro economic strategies and political strategies that history had thrown up.

Contemporary Europe, Germany, France, Sweden, Italy, Spain and the United Kingdom all had quite substantially different ways of dealing with this question of increasing productive capacity and employment without increasing inequality. Some of them were more successful than others, but by and large, they seemed to have gotten it right over the last 40 years or so.

There was an underlying question here, particularly if one looked at the European experience. Because the social conflict was maybe attenuated, it was maybe moderated a lot, but it had not been resolved. Some of the unemployment that Europe currently had to deal with was a function of that. And certainly in South Africa, this issue of linking social conflict to rates of investment and therefore unemployment, was very useful.

If social conflict existed but had not been resolved, then what mechanisms could be devised to effectively and consistently resolve the problem of social conflict? Clearly there were political systems to deal with this.

But, generally speaking, countries had a democratic government and state and, depending on degree, a capitalist economic system. The real challenge for states was to indicate how they could consistently resolve the problem that social conflict could lead to declining rates of investment.

Growth was an option, but Heintz had appeared to disproportionately favour those already benefiting the most. He had also mentioned asset-based redistribution, which was quite interesting and had been tried in some countries. Employee stock ownership plans etc were quite popular. To some extent it had been tried here, to the extent that unions had investment vehicles which invested in the private sector. What lasting effect that would have on the issue of social conflict was unclear. Loewald said that at the heart of his scepticism was the nature of the social conflict and questions about where it came from. Certainly, in European countries, it had been moderated, but not resolved. Hopefully South Africa was rapidly moving to the point where it was moderated but not resolved. The more philosophical question was how it could it be resolved.

On expansionary macro-economic policies, the key constraint Heintz had highlighted was potential depreciation. Loewald said he would change that slightly to say that depreciation was not necessarily a problem, although clearly volatility in macro economic aggregates was very problematic. But more fundamentally, there was an immediate or potentially short-term capital flow problem one had to deal with. Capital controls were probably not likely to solve that problem but were probably fairly useful in easing some sort of transition from macro-economic instability to stability, or from one equilibrium to another.

Once one got past depreciation, the underlying problem was inflation. There had been criticism of European macro-economic policies, certainly in the 1960s and early 1970s, that suggested that they used inflation to reconcile competing nominal claims. This was a way of saying they used inflation to deal with the social conflict problem. It did not work unless it was accompanied by very strong growth. And certainly in the 1940s and 1950s, some of those countries had high inflation, but they also had very strong real growth. In the 1970s, the growth fell apart and all they had was inflation, and, over the longer term, it just did not work.

The underlying inflation problem in South Africa was more readily addressed by the issue of competition and trade policy reform. Left out of the South African equation had been domestic competition and it would have been quite interesting to estimate the impact of the degree of market imperfection on investment as well, particularly if one accepted the view that some part of the social conflict might have been ameliorated by the capacity of unions to have effective bargaining strategies, to use the slope of the drive demand curve for labour in their favour. This suggested that, as markets became more competitive, they would be less able to do so and the social conflict could actually worsen.

On targeting industrial policies and infrastructure, as a representative of the National Treasury (which was what the Department of Finance was now called) Loewald said he would not be self-respecting if he "didn't say also some nasty things about spending money on industrial policy, so I'll just drop that one."

His personal view was that there were a fair number of avenues one could go down. The key question there was getting it right and it needed a public finance critique of any policy to ensure that, with limited resources, funds were targeted as efficiently as possible. That was quite a difficult thing, outside of states that had a highly developed bureaucracy.

On further research, he said one could look at the impact of financial markets. South African financial markets appeared to be fairly closed with not a lot of competition. It would be interesting to explore this. Finally, looking at the relationship between inequality and social conflict would be particularly useful. This was a very complex area and not necessarily always most attractive to economists, but it was important. Johan Fedderke from the University of the Witwatersrand said that the instability index that Heintz had constructed would be useful with the inclusion of an investment study. It suggested that much higher thresholds of rates of return on capital would have to be met before investment was triggered. And if that was the case, if that uncertainty impact was present, then that obviously had implications for how efficient any attempt to move the user cost of capital, the rate of return on capital, was going to be as a policy instrument.

He had done some work on an investment fund, using the broad panel of manufacturing sector industries. It followed the line of the fielding study that Heintz had mentioned but also took into account systemic instability, as measured by the political instability index, and had tried labour unrest, various weights and averages of political instability, which had not changed the results very much.

But his research had also covered sectoral uncertainty, which had been one dimension missing from the Heintz study - the degree of volatility of output within the sector which might have an independent impact on investment performance. Loewald had certainly found that was the case, with the important modulation that it used dynamic heterogeneous panel techniques. It broke up the panel into sub-panels and had found that sectoral uncertainty had particularly strong effects on resource intensive manufacturing sectors, and less so on the others.

He had also found that the user cost of capital did turn out to be significant and offered an additional policy handle for stimulating investment subject to the uncertainty factors. On the NIEP study, he said it was probably worthwhile thinking about the dynamics as well because investment, by its very nature, was something that was a dynamic animal. Using dynamic panels might be something worthwhile considering.

On the methodology employed by Adelzadeh, Loewald said the use of the auto redistributive lag (ARDL) co-integration technique presupposed a unique co-integrating vector, but Adelzadeh had assumed the precise opposite and he had more than one co-integrating vector, which was wrong. It was therefore very difficult to interpret any of his results because one just did not know what was going on there. This indicated the need for much more specific modelling.

Nicoli Nattrass said Heintz's theoretical argument had been based on the notion that inequalities being measured were the functional distribution of income. This meant that one was damned if one did redistribute as increasing wages lowered the profit share and affected investment. But one was also damned if one did not because that would cause instability. In addition, if one chose to redistribute on the functional income side and increase wages, one also increased unemployment. This could create additional social conflict such as crime, but if one did not redistribute one got strikes.

Sam Bonto-Ankomah responded to Nattrass' pessimism by saying that claiming one was damned if one did and doubly damned if one did not, struck him as simply flying in the face of lots of historical experience in which somehow, things had worked out right. There were plenty of cases of countries which had seemed to be faced with problems similar to the ones facing contemporary South Africa, but which, either by luck or design, had managed to get it right. Italy in the 1950s was a good example.

WHEN AND WHY DOES GLOBALISATION INCREASE RATHER THAN REDUCE LABOUR MARKET INEQUALITIES IN DEVELOPING COUNTRIES?

Adrian Wood, IDS, Sussex

Standard theory implied that globalisation would reduce labour market inequalities in developing countries. This theory used the Heckshire Olin Model with north and south, with skilled and unskilled labour, with skill-intensive and labour-intensive goods. It argued that the reduction of barriers to trade tended to cause the south to specialise more in labour intensive production, and reduced wage inequality in the south by shrinking the wage gap between skilled and unskilled workers and raising the real wage of unskilled labour. All this implied that globalisation was good news for labour market inequalities in developing countries.

However, the phrase "wage inequalities" was used as a shorthand here for shifts in the demand for labour. What really mattered was the impact of globalisation on the demand for labour. What happened to wage inequalities depended also on what was happening on the supply side of the labour market and in labour market institutions.

However, the evidence was very mixed about what actually happened on the ground. In East Asia in the 1960s and 1970s, one saw very much the standard story happening as wage inequalities went down when these countries opened up and the real wages of unskilled workers went up.

On the other hand, there was the experience of Latin America in the late 1980s and the early 1990s, when increased openness had the opposite effect on wage inequalities. There was not much good research on the experience of other countries to draw on. In particular, there was a lack of research that disentangled the effects on wage inequality of changes in openness and changes in other factors. But, based on what was available, the evidence was very mixed. There were probably more cases of increased wage inequality as a result of greater openness than there were of reduced wage inequality. Paradoxically, however, there were probably more cases of increases in real wages than there were of reductions in real wages. So there was a puzzling inconsistency between the standard theory and the available evidence.

There were two different, but not mutually exclusive, answers to this conundrum. The first dealt with variations in resource endowments among developing countries, and the second dealt with the transfer of know-how to developing countries that might occur as a result of increased openness. Both were reasons why increased openness through globalisation might cause labour market inequalities to increase in developing countries rather than decline.

Resource endowments differed widely among developing countries when one looked at the land to labour ratio, and the skill or human capital to labour endowment ratio measured by average years of schooling of the adult population.

Africa's exports were concentrated on unprocessed primary products because the region had a high land to labour ratio and low skill levels, whereas Latin America, for example, had a higher share of primary exports as a percentage of total exports, but far more of the primary exports were processed because it had a higher skill level.

There were two reasons why openness could lead to increased inequality rather than reduced inequality. The first was moderate skill to labour ratios rather than low skill to labour ratios. This implied above weighted world average skill to labour ratios, which covered nearly all middle income developing countries. These were fundamentally in the same boat as the north in terms of what reduced barriers to trade would do to labour market inequalities. In other words, unskilled workers in Mexico, for example, would be just as hurt by competition from China as unskilled workers in Germany would be.

The second reason was that if a country or a region with a high land to labour ratio opened up to trade, the abundant factor which was going to gain was land. The scarce factor, which was labour, was going to lose. So the real wage of labour would go down as a result of increased opening in a land abundant region. Africa and Latin America were land abundant, whereas Asian regions were land scarce.

In the 1960s and 1970s, the East Asian regions were not terribly well educated and were essentially completely closed to trade. Their opening up tended to cause the standard effect of a compression of wage equality. At the same time, the East Asian regions had very low land to labour ratios, so there was a tendency for the real wage to go up. The same would have happened in South Asia in the 1990s if it had got its act together and opened up trade. In contrast, Latin America in the late 1980s and 1990s had an above world average skill to labour ratio, resulting in a tendency for wage inequalities to widen, and it was a land abundant region, leading to a tendency for land owners to gain in real terms at the expense of labour, who tended to lose.

South Africa in 1990 was virtually the same as Latin America in 1990, so it was quite plausible to suppose that what happened to labour market inequalities in Latin America in the 1980s and early 1990s could very well be an important part of the explanation of what had been going on in South Africa in the 1990s.

On the transfer of know-how, Wood said the Heckshire Olin assumption about technology was that all countries at all times had access to the same technologies, whether they were in autarky or whether they were open to trade. But this was a very unrealistic assumption for most developing countries.

In autarky, developing countries would just not be able to produce the full range of goods that were being produced in developed countries. And the main reason why they could not do this was the lack of know-how or tacit knowledge of how to do things. This was different from education. Countries acquired know-how rapidly through the mobility of highly-skilled workers from other countries. For example, North America, United States and Canada were able to develop so rapidly because of the migration of workers from Europe, who had the most modern know-how in the world at that time in their heads. It was also, of course, how South Africa was able to develop so rapidly.

But the main means of mobility these days was not permanent migration, it was through business travel and the short-term, intermittent, temporary movement of people, whether they be production engineers from Nike going to Indonesia to help run the factories there, or whether they were buyers from Sainsbury in England going to Zimbabwe to manage the production of fresh vegetables for export.

The standard way of looking at globalisation, which focused on the reduction of barriers to trade, defined as a reduction in the cost of moving goods around the world, missed what had been a very important feature of globalisation over the last couple of decades. This had been the reduction in the cost of moving know-how around the world, and particularly that international business travel and communication had become much easier and much cheaper for a variety of reasons, some of them technological, some to do with transport infrastructure, some to do with the increased sophistication of trans-national companies, some to do with policy changes. So there had been, in addition to the reduction of transport costs on which Heckshire Olin theory focused, a big reduction in co-operation costs. Internationally mobile professional workers were now just about as mobile as capital was.

Lower co-operation costs and the increased short-term mobility of know-how had had a positive effect on real wages. And, indeed, in the long term, this transfer of know-how was the main gain from increased openness. And that was how countries caught up, as had been illustrated by the historical experience of North America.

Wage inequality could actually go either way because of this transfer of know-how, but in quite a large number of cases, the effect could be to increase wage inequality. This could be illustrated by the example of a poor, ill-educated, agricultural developing country, where the population was fairly literate, growing rice, weaving baskets, and all of a sudden an export processing zone was set up, making shirts or assembling radios.

The export processing zone was not very skill intensive by world standards and was, in fact, of low skill intensity by developed country standards. But it was more skill intensive than anything that was going on in that developing country at that time. So this shift of what looked like a rather low skill intensive kind of production by northern standards, raised the skill intensity of production in the developing country, pulled up relative wages and increased wage inequality. This kind of shift could raise wage inequality both in the north and in the south.

This was probably not a plausible explanation of what had been happening in South Africa in the 1990s because South Africa was very unusual among developing countries - indeed, in some ways one would not want to class it as a developing country for this reason - in that it already had a very large and diverse stock of know-how before its economy was opened up in the 1990s. It was producing modern goods over the full range of skill intensities, which was very unusual. And prima facie, one might think it would be a country to which the standard analysis would apply, because it was a country to which the Heckshire Olin assumption about technology fitted much better than it did for most developing countries.

The second reason for doubting that this was what had been happening was that there really was no evidence of export processing zones springing up either in very labour intensive or in the more skill intensive activities. However, a more subtle version of this transfer of know-how might be relevant to South Africa because the ending of apartheid and sanctions did in fact increase flows of highly skilled people in and out of South Africa, and hence caused an accelerated transfer of know-how from the rest of the world in a very wide range of sectors, including non-traded sectors as well as traded ones. It was quite possible that on average, the know-how and the associated new products and techniques that came in were on average more skill intensive than what was going on in those sectors and in the South African economy beforehand.

This transfer of know-how was good and policy should be to encourage the inward mobility of highly skilled workers with know-how. The role of industrial policy would be to indigenise this know-how by working on the much slower and more difficult process of transferring the know-how in the heads of foreign businessmen into the heads of South African residents. When it came to dealing with increases in labour market inequalities, some hard choices had to be made about whether one wanted the bad news in the form of increased wage inequality, or in the form of increased unemployment. And the difference was the same one as had been highlighted in the distinction between the United States and Europe. But apart from that trade-off there was nothing terribly original to be said apart from highlighting the need to do something about the redistribution of assets.

DISCUSSION

Trevor Bell of NIEP said Africa, with the lowest skill endowment and the largest land labour endowment, had little comparative advantage in manufacturing. And that position had not changed much since 1960. Wood's presentation was a forceful reminder that it was ultimately comparative advantage related to factor endowments that determined sectoral patterns of production, and hence trade specialisation provided a correction to the exaggerated importance attached to policy including political economy factors, which was a strong feature of South African thinking not so long ago.

This had resulted in talk about finding market niches like the East Asians and the need for beneficiation with greater processing of primary commodities. But, as Wood had pointed out, Africa could not possibly follow the same growth path as East Asia, which had a very different combination of human and natural resources.

The evidence therefore appeared to provide some justification for the argument that it was resource abundance and the minerals rich character of the South African economy that had been a real obstacle to the development of downstream manufacturers.

The implications for Africa, however, seemed too gloomy and Wood's approach was perhaps too pessimistic. One had been tempted to believe that, with the concept of an African Renaissance at the beginning of what was hopefully going to be the African century, Africa could spring a surprise on the world as the East Asian NICs had done in the 1960s and 1970s, and begin to industrialise rapidly. Did the iron law of comparative advantage put paid to this?

It would be interesting to know to what extent the skills endowment demand was driven rather than determined by autonomous forces affecting the supply of skills alone. Did the comparative advantage in that resource abundance not itself make for low skill intensity production? Would it be possible to reduce the incentive of individuals and the state to raise educational and skill levels, and so cause a low skills endowment ratio?

In South Africa in recent years, with slower growth of natural resources ased manufactured and primary products and the consequent real depreciation of the rand, the range of narrowly defined downstream manufacturers in which it now seemed to have a cost advantage, had increased greatly. If the comparison export composition was anything to go by, South Africa's comparative advantage had shifted strongly towards more skill intensive goods.

The skills seemed to have been available, the much emphasised ill effects of past education and training policies notwithstanding. Lance Edwards' work had also shown that skilled labour was the only category in which employment increased consistently between 1984 and 1997, with a particularly large increase in the more recent sub-period of 1993 to 1997, which included part of the Uruguay round period. This had been due to South Africa utilising more fully its skills endowment due to a change in demand related to trade liberalisation. In other words, it had reflected its comparative advantage in relatively skill intensive products.

Otherwise, one would have to consider the possibility that political change had made possible better use of the available supply of skills in response to changes in the structure of demand, and that South Africa was now in the process of beginning to realise its full potential in manufacturing for that reason. Another possibility one would have to consider was that there had been an increase in the supply of skills. That is, the skills endowment ratio from the mid 1980s to the 1990s had risen as a result of substantially increased investment in education which began in the early 1970s.

Apart from South Africa, there seemed to be a tendency for African countries with some comparative advantage in manufacturing not to realize it by very a wide margin. The shortfall between actual and potential in other African countries might be the result of various things, but it seemed that there was a potential for a rapid catch-up in African manufacturing.

In agriculture, it appeared as if there were some hopeful signs that there would be an increase in the switch from tropical products to staple food products. This was a necessary precondition for manufacturing. It was interesting that South Africa's predicted manufacturing export share exceeded Zimbabwe's, but Zimbabwe's actual manufactured export share exceeded South Africa's. Now the difference in predicted values was apparently partly because South Africa had a higher skills ratio and therefore would be expected to have a higher manufacturing export share ratio. But it might also be because the land population ratio understated South Africa's natural resource abundance, relative to Zimbabwe's. Being minerals rich, the quality of its natural resources was better than Zimbabwe's. The bulk of Zimbabwe's primary commodity exports was agricultural. Tobacco alone made up more than a third of total primary commodity exports and 20% of total exports. Now this difference could also partly explain why Zimbabwe's actual exceeded South Africa's actual manufacturing export ratio, in other words that natural resource abundance had been a real obstacle through much of our modern economic history to the development of downstream manufactures.

The natural resource poor country Zimbabwe would be expected to have a greater comparative advantage in low wage, labour intensive products. Its low skill endowment accentuated this. The difference between the two countries thus showed up in the composition of their manufactured exports with South Africa being considerably more skilled intensive.

There was no hard evidence on the skilled unskilled wage inequality during the period of trade liberalisation in South Africa. But if there had been a narrowing of wage inequalities in South Africa related to trade liberalisation, this would be a most interesting and challenging result which would raise various questions. These would include why the experiences of South Africa and Latin America with roughly similar resource endowment in terms of skills and natural resources should differ in this respect. Was this due to the labour intensity of its exports relative to its imports? Whether, the ill effects of past education and training policies notwithstanding, a rapid increase in South Africa's skill ratio had contributed to the narrowing of wage inequality? Whether such a change in a skills endowment accounted for the skill intensive sectors in South Africa experiencing relatively high export growth rates compared to less skill intensive sectors? Why wage inequality in South Africa should fall in the face of apparently significant decline in the demand for unskilled labour relative to skilled labour? And hence, whether, after all, as some claimed, labour market rigidities, i.e. unions, had had a decisive influence in South Africa, resulting in unemployment of unskilled workers rather than wage inequalities.

Wood said the stock of skills in a country had been shaped both by what had been done on the supply side to expand the skills supply, through the education system in particular, and on the demand side for skills. One could have a very good school system but if there was no economic incentive for people to acquire an education, parents would not send their children to school or keep them there. So there was a very important linkage there, and in some countries one of the benefits of globalisation might be to increase the demand for education and thus to expand the country's stock of skills.

Supply side actions were still very important. If one considered how the land-abundant countries that were now rich got that way, particularly of North America, it was above all through a tremendous push to expand the supply of education. That would also shift the country's comparative advantage increasingly into manufactures, because what really counted in terms of comparative advantage in manufacturing was the ratio of skill to land. So a country could have plenty land, but if it could get the skill level high enough, the skill to land ratio rose to the point where it acquired comparative advantage in manufacturing. And that was indeed what happened in the United States, and that was what could happen, in the longer run, in South Africa.

In terms of what specifically had and had not happened in South Africa, Wood said he was not in a good position to respond, but he would like to encourage researchers here to examine the issue.

Gary Fields from Cornell University said inequalities could increase because the well-educated were getting ahead faster than others. And so the critical question was whether those who were starting behind were getting ahead, or falling behind, because of globalisation. Wood said he had tried to cover this through an emphasis on real wages as well as wage inequality. The transfer of know-how, particularly through the mobility of skilled workers, was the most important thing that developing countries stood to gain in the long-run from globalisation, precisely because it tended to raise the real wages of all workers. In the end, that might be more important than the inequality question.

Rhys Jenkins from the University of East Anglia asked how one could test the model about the increased international mobility of highly skilled workers, and its effects on wage inequalities and real wages. Wood said there were indicators on business travel, the volume of business communications, on the ease of doing business and what was being called competitiveness. It should be possible, ideally in some kind of panel data set, to relate changes in these sorts of indicators of the international mobility of the highly skilled to outcomes in terms of real wages and wage inequality.

Tahir Abdi from IDRC, Ottawa asked Wood to comment on the hypothesis of there being a time lag in the transformation of technology among the skilled and unskilled workers, because the comparative advantage was changing over time so frequently. Wood said the whole business of the transmission of know-how could be seen as being a variant on Krugmen type products, cycle models where new technologies were developed in the north and moved to the south with a time lag. There had to be a story about constant innovation and transmission in the background of this story about the international mobility of highly skilled workers with know-how.

Alan Hirsch from the Department of Trade and Industry queried Bell's use of the word "pessimistic" in relation to Wood's model for development. He asked whether Wood had not rather been suggesting that there was no linear path to development and that different parts of the world could progress in very different types of ways. That should inform South African policy as much as being on the other path informed the policy of the East Asian countries. Wood agreed that "pessimistic" was not the right word. In different regions, there was not one single path to development. Japan and the United States got to positions of very high levels of per capita income through very different paths, fundamentally because they started with tremendously different natural resource endowments relative to labour. He had just been saying that a region like Africa should stop looking so much at East Asia for examples, and start looking westwards at Latin America and North America to get clues about how to proceed.

On the transfer of knowledge, Hirsch asked whether, in the current climate of globalisation, particularly with TRIPS and related issues around intellectual property, that today - as opposed to 20 years ago - necessarily meant foreign direct investment.

Wood said FDI was actually a small and, perhaps, a shrinking part of the process of knowledge transfer through the mobility of highly skilled people. Transnational companies were above all channels through which highly skilled workers moved. But if one looked at the pattern around the world, TNC's operated only in particular, really concentrated sectors where the protection of proprietary knowledge was enhanced by ownership. There were a whole range of other sectors, such as garments and footwear and horticultural exports, where there were very strong business linkages between businesses in the north and businesses in the south, but they did not involve ownership. They were long-term supply contracts which provided a framework within which there was a great deal of exchange of know-how. So FDI was a very important part of the story, but it was only part of the story about the international transmission of know-how. What one wanted was stronger business linkages in general and not FDI in particular.

Jeremy Wakeford from the University of Cape Town said many people working in education would agree that the quality of education was declining quite rapidly at the moment. At the same time, there was a massive outflow of skills, even if there was an inflow of some international skills.

Wood agreed it was important to look at the outflow of people with know-how as well as the in-flow. The Ugandans had conducted an appalling natural experiment by expelling the Asian population who had most of the commercial and industrial know-how in the country. Industry and trade in the country just collapsed. It was a striking example of how a country's stock of know-how was connected with particular people and how moving them in and moving them out altered that stock dramatically.

Wood had also been asked whether the measurement of land took into account whether it was arable or not. He said he and his co-researchers had struggled desperately to find a better measure of natural resource endowments than total land area. They had used every specific measure of natural resource availability they could find dealing with different types of land, minerals, oil, water etc, but had failed to come up with anything satisfactory. But the total land area measure actually worked very well. It was not a very efficient measure, but it was definitely an unbiased measure of natural resource abundance because what was in any square kilometre of land was a result of a random draw. So a country might not not have much arable land, but it might have a very big total land area under which it just might have some minerals. But if one was working on one specific country, like South Africa, the first thing one had to do was to look very carefully at whether these crude indicators were giving a misleading picture, be it land or education. Average years of schooling was a very crude measure, and if the quality of education in a country was way out of line with the world average, either above or below, then one needed to make some kind of adjustment for that.

THE ROLE OF THE SMALL AND MEDIUM ENTERPRISE SECTOR IN LATIN AMERICA: IMPLICATIONS FOR SOUTH AFRICA

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The small and medium enterprise (SME) sector was seen as being key to the overall economic performance of Latin America because of the high level of income inequality in most countries in the region and the capital intensity of production. At the same time, slow growth since the 1980s, a shift towards a greater degree of openness and a generally larger role for the market in the allocation of resources, as well as tighter fiscal policies, had also focused attention on SME development.

All these conditions also applied to South Africa, although the factors at work were sometimes different.

The debacle of the debt crisis in the 1980s resulted in a lost decade for Latin America, leaving it with major challenges on the growth, employment and income distribution fronts. Although the region's growth gradually improved in the 1990s, it had not yet recovered to the levels of the 1950-80 period under the earlier import substitution paradigm. Although the job creation task had eased somewhat in the wake of falling population growth rates, the combination of unemployment and underemployment had remained serious and the associated problem of income inequality had been accentuated in most countries, probably by a combination of the economic downturn itself, economic reforms and the process of technological change. Progress on the employment and income distribution fronts had been less favourable and it was impossible to predict how these factors would develop over the next few years. Worryingly, it was clear that most Latin American countries had suffered moderate to sharp rises in the level of income inequality, usually associated with economic reforms and economic downturns, with a widening gap between more skilled and less skilled workers.

At the same time, trade and other forms of liberalisation had not lived up to expectations of employment growth in this labour abundant region. As a result, greater attention had been given to the possibility that most Latin American states did not in fact have comparative advantage in products which were unskilled labour intensive, but rather in various types of products using more skilled labour and in natural resources, both of which were typically distributed very unequally. Both these scenarios were likely to have a negative impact on income distribution. Some analysts had argued that the rapid pace of unskilled labour saving technological change was behind increasing inequality. All these interpretations put the emphasis on how the demand for labour had evolved rather than on how the labour market functioned. The implication was that, to the extent that inadequate growth of labour demand did not manifest itself in low wages of those towards the bottom of the pyramid, it would instead show up in unemployment or underemployment leading to the same final result - low incomes.

SMEs were seen as special because of their position in the middle of the spectrum of sizes and capital intensities in an economy. On average, the labour demand curves of larger, more modern firms started higher than those of smaller, less modern firms, but were also steeper. This reflected the fact that in firms using modern technology, the productivity of labour was quite high for the few workers needed to complement a given amount of capital, but as only a few workers were needed, the curve fell steeply after starting high. Such firms could pay a few workers quite well but were not interested in hiring a large number of workers.

At the other end of the spectrum was the micro-enterprise sector, which had a very flat labour demand curve. This curve started low as productivity was high for a very small labour input and was relatively flat.

SECTORAL DIFFERENTIATION

In examining the role of SMEs, it was useful to distinguish between the labour demand associated with each of the five sectors of the economy. Agriculture, while still important in most countries, had lost relative importance as a source of employment, even though in a few cases economic liberalisation might have temporarily reversed this process. In a number of cases, new agricultural exports would not be significantly employment-creating, while it was unrealistic to expect this sector to create large amounts of very remunerative employment.

The public sector was, in most countries, under fiscal constraint, which impeded employment expansion.

A large-scale private sector producing tradables might generate significant employment growth in a few countries, but downsizing had been the more normal accompaniment of liberalisation as firms struggled to raise productivity and competitiveness while introducing labour saving machinery and equipment. Employment may thus be close to stagnant for a while before normal growth resumed.

The rest of the private sector could be broken down into the SME segment and the very small firm (micro-enterprise) segment. Micro-enterprises played a very important role in guaranteeing a minimum, albeit quite low, level of income of many people, but did not have the capacity to generate moderate to high incomes for a large number of people. This left the SMEs as the sector not requiring large amounts of capital to grow and which should also be able to produce good levels of income for many people.

In the 1970s, before the debt crisis and resulting recession, employment creation was fairly widely spread among these sectors. But in the 1990s, agriculture, the public sector and large-scale private sectors did not contribute significantly to job creation. This was left to the micro-enterprise sector and to SMEs, with the former playing its usual safety valve role when no other sources of employment were available. Clearly, it was not possible to expect the micro-enterprise sector to continue to carry such a large share of the employment creating function without the average incomes associated with jobs in the sector falling. This contributed to widespread increases in inequality.

In other words, a country endowed with a medium level of resources per person needed to have a large amount of those resources used with medium level technologies unless it wanted to have a very unequal distribution of labour across the available capital. Few workers would be able to achieve very high productivity because they worked with a lot of capital and the rest would be able to attain no more than very low productivity because they were starved of capital. Since, with a few exceptions, the size of an enterprise was rather closely correlated with the level of technology used, this boiled down to saying that such a country should normally have a lot of SMEs.

In some developing countries, large firms seemed to be able to operate without excessively modern technology, but this had not been a hallmark of Latin American development. In some countries, especially more developed ones, a fair number of quite small firms had achieved high levels of productivity through high levels of capital and modern technology. This, however, was very much the exception in middle level developing countries such as those in Latin America. In short, most middle technology firms were also somewhere in the middle of the size range.

HOW IMPORTANT A ROLE CAN SMEs PLAY?

Straightforward logic suggested that an economy's performance would be better both in terms of output and of income distribution and employment generation if it focused a sizeable share of its resources on technologies of middle-level capital intensity, rather than allocating nearly all of the capital to a few workers using quite modern technologies, and almost none to the rest of the labour force. All countries could be expected to benefit from allocating some resources to that middle range of technologies, but an important question was how much difference it could actually make.

The SME sector's contribution to economic performance could in principle be improved either by raising the internal efficiency of the resources already employed within it, or by changing the share of the economy's resources employed by it. If too few resources were directed this way, potential growth would be lost, but if too many resources were allocated, the last recipients were likely to receive little and, again, growth would be lost as those marginal allocations would have paid off better if used in some other way.

Viewing the trade-off between the use of resources in SMEs and in other ways gave a static perspective of the efficiency of allocation. But a dynamic view was equally, or more, important. This covered the implications of the size of the SME sector for savings, investment and technological change. This indicated the growth implications and also the dynamics of adjustment when an attempt was made to reshuffle the structure of the economy (by size in this case) with a view to raising its efficiency. In the latter case, the question of path dependency might become important although the role of the SME might, for example, have been a large one had a path conducive to that outcome been followed. If the opposite path was pursued for too long, that option may have been squandered.

STATIC EFFICIENCY OF SMEs

Total factor productivity (TFP) analyses have been carried out with some frequency in Latin America and elsewhere, both to assess the relative efficiency of different branches of industry, different sizes etc, and to measure the change in such efficiency over time. They provided useful evidence on performance and distinguished firms or plants by size, which usually led to comparisons of relative efficiency.

For example, if resources currently used by large enterprises were shifted to the SME sector (or vice versa), the conclusion could be that if the estimated TFP in the SME was higher than in the large enterprises, then the economy would gain from such as shift (and vice versa). But this conclusion was justified only under a rather restrictive set of conditions which included the accurate measurement of all inputs (and allowance for quality differences) and the validity of the implicit assumption that the higher TFP sector could be induced to increase its input use. This might well not be true.

The literature did not point to any consensus on the relationship between size and productivity. Many studies did not include sufficiently accurate measurements of inputs to provide much confidence in their conclusions. Some studies had found rising TFP by size while others had found TFP peaking somewhere in the middle of the size distribution. Almost none of the studies could boast very satisfactory measurements within the micro-enterprise and SME size range. One study had even come to a different conclusion, finding that TFP was typically a declining function of size once the unit had more than one worker. These different findings indicated serious measurement problems.

THE DYNAMIC EFFICIENCY OF SMEs

A number of recent studies had highlighted the fact that many smaller firms were also young ones, and that, in assessing the economic potential and contribution of SMEs, it was important to be aware of firms' life trajectories, not just their point of time status. Rates of entry and exit were higher for smaller firms than for larger ones, so, once again, the SME was in the middle of the spectrum. It was undeniable that many very small and young firms did not survive, and that there was some loss of societal resources in that process of failed attempts, though most of the lost resources were those of the entrepreneur.

Those firms that did survive for a few years and grow to a small (as opposed to very small) size, were already quite efficient from a static point of view. They were also able to grow, contribute to the process of accumulation of resources and innovation in terms of technology and management. Most large firms began their lives as relatively small ones, so the contribution of SMEs in the early years of their history was inextricably linked to the larger firms of a few years further on. In an overall assessment of the role of SMEs in an economy, the considerable rate of turnover which characterised even the small-medium sized firms in most economies did not appear to have any clear-cut implications for the sector's usefulness to the economy.

SME's OVERALL CONTRIBUTION AND POTENTIAL UNDER LIBERALISED TRADE

Recent literature from virtually all parts of the world emphasised the important contribution that SMEs could make to an economy's overall strong performance. This was due to a better recognition of the scope of SMEs in economies and a more careful thinking through of the role of firm dynamics in economic structure and performance. It had been recognised that some of the world's best performing economies, notably Taiwan and Hong Kong, were very heavily based on small enterprises. A few experiences from Latin American suggested that SMEs could be a major source of dynamism, but cases where the SME sector had played a major role were still few.

The outward-oriented East Asian countries had been very successful in hooking SMEs into the export process, through some combination of direct exporting by smaller firms (often through relatively small intermediary agents, as in the case of Taiwan) or through sub-contracting by SMEs with bigger firms, as in Japan over a long period and in Korea with increasing intensity since the mid-970s. This export orientation was particularly attractive to Latin American countries at present given the challenge to succeed in a more open context and to do so on both the growth and the distribution fronts.

THE ECONOMIC CONTEXT OF SMEs

Like other firms, SMEs existed in networks of supplies, buyers and competitors. More than larger firms, which at least have the option of handling many of their needs in-house, SMEs relied on other firms or institutions for their inputs, for the training of their workers, for help with their marketing needs etc.

There were three broad groups of SMEs according to the nature of their relationships with other firms: those which were sub-contractors; those which were members of clusters of small firms; and those which were more or less independent. In each group there were different needs. Sub-contractors could receive considerable help from the contractors with which they did business; members of clusters tended to cater for their needs through collective action in, say, marketing, technical assistance, training, buying inputs and the like. Independent firms were, of course, more dependent on themselves.

Many needs were common regardless of setting. Firms had to achieve a certain level of efficiency either to be successful as independents or to qualify as candidates for either of the other two arrangements. Contractors were not willing to invest their time or efforts with sub-contractors who were nowhere close to being efficient producers. Clusters had to have high levels of collective efficiency if they were to compete in world markets. Interesting efforts were being made in Latin American countries to facilitate links between large and small firms, to develop denser sub-contracting systems and to foster effective collective action by SMEs in exporting, buying inputs etc. These developments were encouraging and indicated creativity, but it was also clear that they would have to be multiplied many times before the SME sector could inject dynamism into Latin American economies.

SME success also depended on the ability to participate effectively in international trade, either as a direct or indirect exporter or as successful competitors with imports.

POLICY VS EXOGENOUS FACTORS IN THE PERFORMANCE OF SMEs

A major issue in SME development was the extent to which exogenous factors played a role. These could include the wealth of entrepreneurial talent, a culture which favoured the business characteristics that were friendly to the development of SMEs, a topography conducive to a dense network of small firms, or a history which did not produce a lot of large firms. In other words, how much of the experience of a country such as Taiwan had been just plain luck, and therefore could not be repeated by even the most astute and well executed policy in some other country?

There had been a good deal of scepticism in Latin America as to whether the region, given its different institutional and cultural background, could copy the Far Eastern experience. This scepticism should be taken seriously, but not over-emphasised. Any judgements about the impact of policy had to be qualified, but the experience of Korea since the mid-1970s provided a good test of what a concerted and well-organised attempt to support SME growth could do. The lessons it suggested were interesting and encouraging. In the early 1970s, Korea's industrial structure was more similar to that in countries such as Brazil and Mexico than to that in Taiwan, at least in the sense of being dominated by large, vertically integrated firms which did relatively little sub-contracting, and in that the SME sector was accordingly much less important than in Taiwan or Japan.

Since then, however, Korea had moved very rapidly in the direction of those other two countries, with very fast SME output and employment growth. At the same time, the level of inequality in the country had diminished. Most of the SME growth had been due to a rapid increase in the density of sub-contracting, or a move towards the Japanese model of industrial structure. Korea's sharp shift of structure was due in part to an increase in competitive pressures associated with the appreciation of the yen and the won in the mid-1970s, and to a concerted effort through public policy to expand the role of SMEs. Both these conditions could be approximated in Latin America.

The opening up to international trade would have an effect somewhat parallel to the appreciation of the Korean currency. In fact, many people believed that the relatively low level of sub-contracting in most Latin American countries had been in part a product of high levels of protection. The second condition of a well designed and vigorous set of policy supports was at the disposal of these countries if they took up the challenge seriously enough. A well-designed policy package was not expensive, but it did require a level of serious dedication which had, for the most part, been absent in the past.

POLICIES WHICH HELP THE MOST TO INDUCE STRONG SME GROWTH

The SME sector was a very heterogenous one, so a uniform package of policies could not be applied across the board in all countries. At the same time, SME support systems and policies varied markedly between countries and experience had shown that good co-ordination between all the different players was essential. SME interests should also be well-represented in policy making to ensure that their real needs were met.

One policy which mattered to more and more SMEs as economic integration proceeded, was exchange rate management. Although SMEs could be flexible and agile, they could be more vulnerable than larger firms to external shocks. The inflow and outflow of "hot" money putting pressure on exchange rates could severely damage or even kill off essentially healthy SMEs. Most of the other key policies in support of SMEs were more macroeconomic in character. Most aimed to help these firms be more efficient and competitive while also creating relatively good-income jobs. Many also increased firms' performance capability and also the likelihood that they would be able to enter useful sub-contracting relationships with large firms or be productive members of a cluster.

MARKETING was a key challenge and participation in trade fairs at home and abroad could help penetrate export markets. Given the general failure of government institutions to deliver marketing support, a better approach would be intervention with a "light touch" that helped firms find buyers for themselves. Export marketing should also be decentralised and tailored to the specific realities of individual markets so as to be able to respond to a wide array of players and market mechanisms. Industry associations could play an important role for specific sectors such as leather or garments and could work closely with public sector agencies to organize trade fairs and visits abroad.

TECHNOLOGY UPGRADING. In general, private, rather than collective, mechanisms worked best. In Japan, strong vertical and horizontal inter-firm relations drove the technology acquisition process. Where such links were limited, the challenge of technological acquisition was a formidable one leading to technological isolation and ad hoc learning.

Collective technical support could be "broad-based" contributing to the emergence of an "information-rich" environment, or it could promote "high intensity" technological learning by supplying technical inputs directly to firms. The former enhanced the overall availability of usable information, leaving firms to judge what information sources might be most useful, and how they might be adapted to a firm's specific needs. It involved things like sponsoring courses on specialised topics, helping a range of firms gain access to specialised consultants, and promoting information sharing among firms.

Broad-based collective support could be most effectively delivered by decentralised institutions. These could be industry associations, independent non-governmental organisations or local governments in specialised industrial districts.

High-intensity collective support could meet the specific technological needs of firms which were not met through other channels. These needs were only likely to emerge at relatively high levels of technological complexity and should not be tackled by countries with no overall record of strong performance by parastatals. Where assistance was provided collectively, it often made sense to do so to groups of clients.

The role of ACCESS TO CREDIT in SME development had always been a controversial topic. Was the lack of credit a major impediment, and would financial liberalisation improve or weaken access to credit. The evidence on both counts had been ambiguous.

There was little doubt that SMEs could grow more efficiently with better access to credit, but it was less clear what the limits were to the likely performance of a financial system in terms of allocating credit to the "right" borrowers. But it could be said that a financial system would work better when it had better designed rules to guide lending to SMEs and more staff with SME-specific expertise who could be discerning lenders.

The impact of financial liberalisation was regarded optimistically by those who believed that the public sector banks that focused on SMEs were ineffective and that private sector banks could do a better job, especially if interest rates were brought closer to equilibrium levels so that credit allocation was guided by which sectors had a strong effective demand for credit. Research had indicated that smaller and generally less well-placed SMEs relied more heavily on public sector banks while their better placed counterparts drew more on the private banks.

The degree of development of the financial markets played a role, especially in the performance of credit guarantee systems. Such systems worked relatively smoothly in Japan, partly because they were mainly operated by local associations which had a better sense of the risks involved in certain areas, and in Korea, were the guarantees were only partial and banks had to be very careful in their credit evaluations and credit collection.

By contrast, especially in their early stages, several Latin American schemes had suffered major incentive and other problems. This had resulted in high default rates, often accompanied by long delays in the guarantee system in compensating the banks making the defaulted loans. As a result, lending institutions were wary of lending to SMEs except where strict collateral requirements were met. This tended to defeat the purpose of the guarantee system.

Support for appropriate EDUCATION AND TRAINING through institutions could play an important role in SME development. The SMEs could not supply most of their own training needs in-house, both because of a lack of resources and out of fear of "poaching" by other firms. Latin America's training institutions, which originally only catered for the needs of large firms, were increasingly realising they had to focus more on SMEs.

The encouragement of SME suppliers through public sector purchasing could also play a role, as could industry associations, the active encouragement of links between small and large firms, network support programmes and sub-contracting exchanges.

In providing SME support, it should where possible be provided on a group basis to promote inter-firm co-operation. They should be provided for limited periods to avoid the creation of permanent bureaucracies, but at least until the benefits were satisfactory.

Finally, it had to be recognised that no simple formula had been found to energise the SME sector. Although a good credit system could be part of an effective policy package, it was by no means enough. Industrial estates, incubators and other similar ventures had had mixed results and there was no evidence that they should be a significant part of a good support system. All programmes put in place should be seriously and consistently monitored to build up a solid body of knowledge on what worked and what did not.

DISCUSSION

Stephen Golub of Swathmore College said he had spent a good part of the last two years in Senegal in West Africa where, in addition to doing research, he had also served as an advisor to the government on private sector development. Senegal was a very different animal to South America and he agreed with Berry's parallels between Latin America and South Africa. Senegal, however, was very different. Nonetheless, he had found that a lot of the same issues had come up there, reflecting the fact that SMEs were coming to the forefront all over the world.

Focusing on the policy dimensions of the paper, he said the central messages of the paper had been that SMEs could play a vital role in economic development and were helpful in terms of the classic equity: efficiency trade-off in that they made more effective use of capital, which was one of the scarce resources in the developing world. It was a win-win situation.

In addition, the paper had recognised the importance of government intervention with a light touch. The twin dangers that any economic policy maker confronted were market failures on the one hand, and government failures on the other. Earlier on, economists tended to emphasise market failures and therefore pushed for heavy government intervention. Latin America of course, suffered from that in many ways. Maybe, in the so-called Washington consensus period, economists had moved too far in the other direction by emphasising government failure too much. Now, with the post-Washington consensus, the importance of both government and market failures was understood and everyone was trying to figure out pragmatically what to do about that. Government had to intervene, but it had to intervene with a light touch.

In Senegal, there had been no shortage of government agencies in this field but they had all been ineffective. It was not a matter of just creating more bureaucracy, more government interventions. One really had to get it right.

Berry proposed a very sensible framework for policy towards SMEs, but gave no blueprint. Many of his suggestions were sensible, such as supporting industry associations and linkages between large and small firms. Nonetheless, it had to be asked what government's precise role should be. The paper did not provide many answers there, perhaps because there were none.

Credit, for example, had been a really big issue in Senegal. This had not been such a big problem for the large industries or the really small ones. The large ones could get credit from the big banks while micro enterprises went to NGOs for help. But there seemed to be a real shortage of credit for the SMEs. Was this due to market failure? Or was this an area in which the government could help SMEs prepare viable balance sheets, for example. In Senegal, a lot of these SME entrepreneurs could not even read and write. Secondly, did the DTI and related ministries and institutions have the skills to help out?

Golub said that it was interesting that the models here had been Korea and Taiwan, countries which had done almost everything right, or at least more right than any other country, and what was it that distinguished them from others? Was it state intervention? Was it reliance on markets? He was concerned that, as far as the policy issues were concerned, the distinction between SMEs and other firms might have been overdrawn a bit, and that the policies identified for SMEs might also be helpful to the entire economy. This could cover infrastructure and labour regulations, for example.

Berry said that when it came to policy formulation, the first thing to do was to take stock of what the sector looked like and to think about it collectively. It would also be important to canvass in a much more systematic way the experiences around the world in countries that were more similar to South Africa than were Korea and Taiwan. There had been a lot of experiments, for example, on the linking of small and large firms, and Brazil had a very innovative programme which could tell one some things not to do, some things to do.

Similarly on the credit side, there had been an increasing body of information which could help indicate what the nature of the credit problem was for the SMEs.

The fact that access to credit could be important for certain sub-sectors, but was not adequately provided, could be called a market failure, but this was a very complicated question which he did not feel qualified to get into.

Chile was an example of a country which had done a lot of things right at the micro level, and although it did not have a vibrant SME sector, probably because its trade strategy had precluded that, it had done some of the right things. These had included subsidising the first use of certain types of technical assistance, and then taking the subsidies away so that firms did not get addicted to the subsidy without making successful use of the assistance.

Geeta Kingdon from the University of Oxford said that the smallness of the sector could be due to the fact that although government could provide support institutions for SMEs, policy makers were placing stumbling blocks in their way through labour regulations, which were imposing high labour costs on small firms.

At the same time, harsh licensing controls and fines were arbitrarily imposed by various local authorities. There appeared to be no consistent national policy on this.

Dirck Stryker from AIRD said Berry had looked at the question of globalisation primarily in terms of the opening up of trade and the expansion of trade. He believed that there was another aspect of globalisation, namely changing technology, that had to be taken into consideration. In the United States, growing wage inequality had been blamed on the opening up of markets and the fact that the US was competing with low waged overseas unskilled labour. But the bulk of the evidence now supported the view that what had in fact happened was a shift due to the changing technology, which had increased the value of skilled labour and had not correspondingly increased the value of unskilled labour. This had been, to a large extent, a kind of an autonomous type of change, which had taken place associated with information technology and associated areas.

Stryker said that in his research, particularly in the garment and textile industry, he had become increasingly aware that industry was very different today from what it was 20 or 30 years ago when the Asian countries were developing on the basis of low wage, relatively unskilled type of labour intensive exports. Now, it was very difficult to compete with that and increasingly, the sector was much more intensive in the use of just-in-time delivery, design specifications that moved by telecommunications and all kinds of areas that demanded a lot more in the way of skills. Another tendency evident in the United States with the shift in technology, had also been a re-orientation away from large firms towards smaller firms. The most rapid growth had been in the area of smaller firms, Microsoft being just one example.

Vusi Gumede said that it was likely that labour regulations per se were not really problematic for small business, but that this needed further study. So did the export process of SMEs and the roles played by value chains, networking and intermediaries. Berry said that one of the major contrasts between most Latin countries and South Africa was clearly in the way the labour market functioned. In Brazil's it functioned without much intervention of the sort that would influence income distribution, and it was the productivity in the micro sector, not the small and medium sector, that set the wage floor.

He admitted that he had given a very positive view of the SME sector, but one had to be aware of the fact that weak regulations could be very environmentally damaging, work conditions were often bad and labour abuses could be bad. So getting the good and avoiding the bad was not a trivial thing.

Dave Kaplan of DTI said that in South Africa, the imperative of getting the SME sector going was partly an economic one, but it also had strong political connotations. Getting the SME sector going was seen as a major way to black economic empowerment and the hand of government had been somewhat less than light. What was the role of government procurement in supporting SMEs? What was the role of government procurement in advancing the technological knowledge capacities in SME's? Could that be done? Where's that being done effectively? Where did one look for effective examples?

Secondly, was there a case for investment incentives, particularly for small firms? And was there a case for investment incentives to take the form of, for example, cash grants etc, recognising the kind of liquidity type problems etc that small firms faced? Who had used them effectively? How would you administer them? How would you put into place such a set of effective investment incentives, cash grant type schemes?

Berry said it was clearly important to have some source of start-up capital and access to low priced machinery from a good second hand market, as in the case of Columbia.

Government procurement had not had an aggregate national impact in any country he could think of, although it had been tried in Brazil. On the question of empowerment, Berry said this was a difficult area in which it would take time to get the desired results. A clear first step was to work on the entrepreneurial development side, which was a generally important policy area in which there were bursts of experience and information around the world. They had not been well accumulated and digested, however.

A FUTURE FOR LABOUR IN THE GLOBAL ECONOMY

Samuel Bowles, University of Massachusetts Amhurst, USA

John Mynard Keynes said at the height of the great depression: "We each have our fancy. Not believing that we are saved already, each should like to have a try at working out our own salvation. We do not wish, therefore, to be at the mercy of world forces working out, or trying to work out, some equilibrium according to ideal principles, if they can be called such, of laissez-faire capitalism. We wish for the time at least...to be our own masters and to be as free as we can...to make our own favourite experiments towards the ideal social republic of the future."

This resonated even more powerfully today. Did globalisation make it impossible for us to experiment towards our ideal social republic of the future? Among economists, there was some consensus that it might not be impossible, but extremely difficult. Charles Kindleberger had said some time ago that it had already happened, and that "the nation state is just about through as an economic unit. It is too easy to get about. 200 000 ton tankers, airbuses and the like will not permit the sovereign independence of the nation state in economic affairs."

The key question was whether globalisation compromised efforts by the nation state and trade unions to alleviate poverty. By an unhappy act of fate, the internationally mobile factors of production, capital and professional labour tended to be owned by the rich. For that reason, nation specific taxes on these factors of production tended to be offset by output reducing re-allocation to the factors. In a highly globalised environment, there was a rather high cost of attempting to alter the relative prices of factors of production, for example, by raising the wage relative to the rate of return on capital through trade-union bargaining.

This was another restriction of globalisation on the autonomy of trade unions and states. It sounded as if Kindleberger might have been right, and indeed many had concluded that in open economies, re-distributive programmes were unlikely to help the poor in the long run, could actually hurt the poor and would tend to be politically unfeasible in the sense that because they would be so costly, they would probably be defeated by coalitions, something which might not have happened in earlier, more closed economies.

The problem with this line of argument was that some of the more politically and economically successful examples of such re-distributive policies had occurred under circumstances which would, on the above account, appear to have been a prohibitive environment for egalitarian interventions. Some small open economies had very successful egalitarian re-distributions. These examples had included East Asian land reforms, and the Nordic social democratic economies.

The ultimate in an open economy was a state within a nation. The states of West Bengal and Kerala in India were not national states. They did not control a treasury, did not have monetary policies, and had absolutely no control over the movement of goods or factors of production across their boundaries. They were the nightmare of the globalisation-phobes and presumably it would be impossible to pursue egalitarian policies within the confines of these states. But the Communist Party of India, which had won elections in both states repeatedly over a long period of time, had successfully implemented land tenure reform in West Bengal, which had very powerful effects on both agricultural productivity and on rural incomes. Kerala had very effective human resource development strategies which had given it almost first world scale demographics regarding child mortality and so on. These examples suggested that there were some rather dramatic examples of countries embedded in the world economy that had done the very things that the globa-phobes said were impossible.

Another example was world capitalism itself in the period since World War II up until the mid-1970s, which could be called the golden age of redistribution. This did not seem to have killed the capitalist development process and suggested that the globalisation argument was a bit too pessimistic. To test this, Bowles had attempted to look at the change in openness over a period of time and the change in inequality, and determine whether there was any relationship between the countries that had become more open and whether they had become more unequal. He used many different measures of openness such as trade ratios, exports plus imports over GDP, Gini co-efficients etc. Surprisingly, he found that the countries which had experienced the greatest increase in openness had not experienced above average increases in inequality. This did not mean that openness had no effect, but that a lot else was going on.

He then examined what programmes of egalitarian redistribution or social insurance were implementable by nation states acting independently. An extreme case said capital was so mobile that national differences in expected profit rates, after taxes and taking account of differential risk among nations, were unsustainable. It turned out that globalisation did appear to have impacts, and it was important to think about what could be done as the world moved a little closer to the rather extreme hyper-mobility assumptions that he had developed.

In developing the complicated problem of a general equilibrium model of the world, he had made some assumptions - investment relocated globally in response to differences in expected after tax profits rates and, domestically, each domestic national labour market was such that the real wage co-varied with the level of employment - that is, as employment rose, real wages rose. The latter meant that as one moved towards full employment, wages would be driven up. Wages would also be determined by productivity, the level of taxes, how much monitoring was done of the work force and, ultimately, profits.

If output per worker rose, the wage that could be paid increased and that increased the amount of employment could be sustained. So obviously a key factor in employment-enhancing policies which would serve the interests of workers had to be productivity enhancement. This involved solving incentive problems arising in the work place because workers did not own the fruits of their labour. This would involve rearranging property rights so that people became "residual claimants" on the consequences of their own non-contractible actions. This could take the form of collective bargaining agreements, workers owing their own firms, co-ops or land reform. At the same time, insurance policies could reduce the productivity dampening impact of redistributing property rights to the poor and to workers. Giving property rights to poor people and workers would make them conservative about how they used and the insurance would attenuate or reduce the risk averseness that often came with wealth distribution.

This had to be accompanied by the efficient provision of public services. A tremendous amount of output per head in the work place depended on the efficient provision of things such as schooling, infrastructure and public safety. Inefficiency in the public sector was often a very deleterious thing for workers, who depended on the state more than most people did. There was also huge scope for reducing income disparities among the non-wealthy by reducing discrimination by race and sex, and by introducing a basic income grant.

He concluded that globalisation made it quite costly, perhaps impossible, and politically infeasible to depress the expected after tax profit rate, or to alter the relative price of tradable goods and services. But while globalisation fixed the relative prices of some productive services, it precluded neither an egalitarian redistribution of the tangible and human assets from which those services flowed, not the enhancement of the assets currently owned by the less well off, nor the improvement of the institutionally determined flow of services from labour assets. This gain-seeking competition did restrict the range of economically and politically sustainable relative prices, but did not preclude egalitarian redistribution.

The fundamental theorem of welfare economics defined conditions under which any technically feasible and Pareto optimal distribution of welfare could be attained by some redistribution of assets followed by perfectly competitive exchange. The theorem was not intended as a guide to policy, but it did underline an important truth: to the extent that globalisation heightened competitive pressures, it might reduce the attractiveness of redistributive approaches which relied on altering relative prices, but this hardly exhausted the set of egalitarian strategies.

An implication of all this was that the traditional vehicles of egalitarian aspirations - trade unions and states - had a different, but no less important, role to play in a highly competitive world than in closed economies. The scope for conventional governmental and trade union measures which reduced after-tax profits was indeed restricted. But policies to implement Pareto improving productivity gains might in some respects require a greater, rather than a lesser, degree of collective intervention. Examples included an expanded role for publicly-provided insurance to improve the trade-off between peer monitoring gains and sub-optimal risk-taking losses entailed by more extensive residual claims and control of assets by the non-wealthy, and greater involvement of collective bargaining in more closely aligning the incentives of employers and employees with respect to both working and learning on the job.

There were two take-home messages. The first was that institutional differences across countries made a huge difference. There were choices to be made and the choices made a difference. The second was that micro economic relationships really mattered. One needed to know how responsive businesses were to things like taxes and wages, and to beware against exaggerating those responses.

Finally global integration altered the set of politically feasible and economically effective redistributive policies. It favoured new roles for states and unions, not lesser roles. Globalisation made incentives a lot more important. As the world moved more and more into the information based economy, the necessity of giving voice to working people and redistributing wealth, so as to solve incentive problems, and to bring about a more just world, would become more imperative.

DISCUSSION

Stephen Gelb from the Development Bank of Southern Africa, the discussant, said the paper drove home two very important policy messages. The first one was that there was no necessary negative relationship between globalisation, on the one hand, and egalitarianism, on the other.

Asset-based redistributive policies could contribute positively to growth even in an era of globalisation. Secondly, there was a role for the state, in particular, and also for the trade union movement, in developing countries in promoting redistribution in the context of globalisation.

These were contrary to two views he found problematic - the first one being the view that, in the period of globalisation, the state was powerless, as was argued by many people. And the second view was that the notion that globalisation could either be rejected or ignored. States had to engage with globalisation critically and there were things that they could do, there were policies that they could pursue.

Nevertheless, Gelb said that he had found the paper and the model, which it presented to be somewhat ambiguous in certain respects. The importance of asset redistribution was underlined by the growing body of evidence from Latin America and Africa in particular that poverty was linked not simply to unequal returns on assets, but also to the unequal distribution of the stocks of those assets. And in the case of poor and predominantly agrarian economies, this led to the policy conclusions that asset redistribution, in particular land reform on the one hand and education improvements on the other, were the best approaches to reducing poverty. This could at the same time contribute to growth.

But in less poor or semi-industrialised countries, where a larger proportion of the work force was urbanised, and in industrialized economies, land reform was less likely to have the same impact on distribution and on poverty alleviation. The paper had not left one entirely satisfied on this. It was not very clear what labour-based or industrial labour-based policies existed over and above the enhancement of skills and of training. On the one hand, the paper emphasised the potential of productivity improvements as a result of any policies which lowered the monitoring costs per unit of labour. These did not depend primarily on asset redistribution, at least as expressed in the paper, but rather on processes such as a larger role for the trade union movement in the monitoring process or else greater competition in product markets.

On the other hand, the one form of asset redistribution which was discussed at some length in the paper in relation to productivity improvements, was distribution in terms of the rights to a basic income. And in fact, as the paper argued, this did not lead to a rise in employment or in wages. It led rather to a redistribution of income amongst the non-wealthy.

So in the end, one was left feeling that one was not quite sure what the asset base redistribution mechanisms would be that were appropriate to an economy such South Africa's. Bowles' conclusion was that egalitarian distribution depended to a considerable extent on some sort of implicit social contract supporting greater equality within the society.

He had asked whether capital could be left out of this implicit social contract and seemed to imply that indeed business capital, the wealthy, could be excluded from this social contract. He suggested that a notable effect of globalisation was that it made the non-wealthy members of nation residual claimants on their productive efforts and their success in solving productivity dampening co-ordination failure. This inverted the more common relationship in which the wealthy were the residual claimants and, in fact, productivity improvements were fully captured by the non-wealthy. So he clearly said that capital could be left out of this implicit social contract, even under hyper-globalisation, and that capital in the single global capital market was essentially not relevant to the collective action problems of individual national economies. The state could introduce policies to enhance productivity without involving capital.

Gelb said he found this conclusion rather surprising and, indeed, wrong, because by leaving out the wealthy or capital, this also eliminated the whole problem of investment. If it were true that capital was restricted to a fixed profit rate, as the paper argued, there would be little incentive to invest, and particularly to innovate. Productivity change would be linked only to the sort of institutional and incentive shifts that were discussed in the paper. Alternatively, in a situation where productivity improvements did occur due to innovation, surely the global profit rate had to increase and therefore the wealthy had to capture some share of the productivity improvement. The issue was surely therefore the more mundane one that effective states captured a larger share of global productivity gains vis-à-vis ineffective states.

The paper had also skirted round the issue of uncertainty and its effects on investment, although it did refer to the risk premium. Gelb said most firms waited to invest until, and if, uncertainty dropped. Bowles' model seemed to treat the role of the risk premium as basically an exogenous factor while Gelb said he would argue that in the long run the risk premium was surely endogenous in the sense that sustained growth for an economy would lead to a reduced risk premium in that particular economy. But more importantly, there was also a sense in which the risk premium was endogenous in the short run in the policy process. And policy attempts to shift the labour supply function upwards could and probably would lead to a rise in the risk premium so that investment would disappear. Investors would choose to wait because of the increase in the risk premium.

This adverse shift in the risk premium could occur for reasons which were unrelated to national economic or political dynamics such as "the bad neighbourhood" effect, the sort of emerging market contagion effects all were familiar with.

The conclusion was that the emergence of some kind of social compact, some kind of solution to the national collective action problem in favour of more egalitarian distribution, had to occur if one was going to be able to undertake this sort of redistributive policy. But it had to include capital. There had to be some kind of agreement around shared growth, some kind of social compact about the need for some more basic floor of income level. There had to be some way in which the national leadership or different interest groups could agree to basically move in the direction of more egalitarian distribution.

Bowles agreed that it had not been exactly correct to say that the risk premium was not endogenous. Other papers by him and fellow researchers had tried to identify those cases in which one could redistribute capital in such a way that one could actually pay off the previous owners at a rate of return which was equal to, or better than, what they were getting. In other words, was it possible for states to redistribute in ways that were win-win? It was sometimes the case that working people or farmers could better manage the asset than the landlord or the owner, and the reason why they did not now have the asset was because they were so poor. Making them rich solved the production problem in such a way that one could actually pay off the previous owner. It would not be a confiscation, but a problem solving solution.

The folklore of redistribution might be out of date but there were a lot of modern examples of worker- owned production units, some of them quite large, many of them quite effective, which solved the problems of production and incentives and monitoring to gain sharing and profit sharing and ownership of the assets.

Some of these took place through a redistribution of de facto property rights within existing enterprises without workers owning the assets outright, but rather by getting a claim to be residual claimant on the profit stream of the firm. There was huge scope in the area of home ownership as this could be asset based redistribution that was also productivity enhancing.

Michael Samson of the Economic Policy Research Institute at Williams College asked how productive a basic income grant would be, not only in terms of providing insurance that promoted risk-taking but also in correcting structural impediments in labour supply, where poor workers did not have the resources for job search or could not afford the living standards that made them optimally employable.

Bowles said such a grant was not a productivity enhancing policy, but it was a very good way of redistributing income to the poor. It had very strongly egalitarian consequences because not only did it redistribute to the very poor, it also redistributed between men and women and presumably therefore had effects on bargaining within households and so on. And it had virtually no incentive effects because one would get the grant no matter what one did. It had tremendously good incentive effects in that sense, but if there was to be an anti-poverty programme, this was a pretty efficient way of doing it.

It could have productivity enhancing effects because it would allow people, particularly where the poor were really poor, to search for work and feed themselves. There was a significant fraction of people throughout the world who literally did not eat enough to work productively.

Albert Berry of the University of Toronto asked Bowles to explain his views on the relationship between the taxation of capital incomes and asset redistribution. To what extent was the latter constrained by the former? Bowles said countries could not confiscate assets and expect private investors to continue investing.

Asghar Adelzadeh from National Institute for Economic Policy asked how the cost of redistribution would be met. Bowles said it was not so much a question of whether the country could not afford it, but whether it could afford not to. Existing policies were inefficient by comparison with the ones he had outlined. These could be financed in a number of ways, in some cases by eliminating ineffective policies. In the case of home ownership or the redistribution of assets to workers, he believed workers could better manage the assets and redistribution would cost nothing while there was an enhancement of productivity of the economy.

Erwin Friedman asked about the efficiency of a large scale community based public works programme which both enabled one to transfer income to the poor as well as to provide for the productive building of assets which therefore resulted in a transfer of assets, but obviously on a significant scale so that it affected all the poor and not just a very small proportion. Bowles said that in some parts of the world, they had been very effective in providing a source of income for very poor people, often on an ongoing basis, but sometimes periodically during the year. They had been quite well targeted and had actually provided things that worked.

CLOSING PANEL: PATHWAYS TO GROWTH AND EMPLOYMENT IN SOUTH AFRICA

Rashad Cassim of TIPS said he had been amazed at the convergence of ideas there had been during the forum and the mutual identification of what the key research issues were. He said he had detected a feeling among policy makers that they wanted more policy input into this kind of conference and the direction of research away from pure econometrics and methodology.

Elias Masilela, the Acting Chief Director at the National Treasury, said the policy and research debate of South Africa was a function of what the demands or the needs of society were against what was delivered. When one looked back to 1994, three broad key objectives were set under the RDP, which GEAR later set out to achieve. Despite the failures that inevitably occurred, the key objectives of the macro-economic policy remained pretty much in place. However, government had discovered that there was a very close relationship between growth, investment and savings. One of the major weaknesses identified had been insufficient savings, which had led to poor economic performance.

Growth had tended to fall within a very narrow band of between 1% and 4%, at the most, and recently the economy had not been able to break beyond 3% to 3.5%. Other economies which closely resembled the South African economy had tended to have much broader growth bands. This raised the question of why some countries could break out of the 3.5% growth rate and why South Africa could not achieve the 6% growth rate which GEAR had targeted. One of the key reasons identified had been the poor performance of the fiscus whereby historically the South African government had been running deficits of a very poor quality. This had basically meant that the country had been dis-saving. There had been some form of a turnaround following the adoption of a consistent macro-economic policy framework, which was turning the dis-savings trajectory upwards.

Internationally, there had been a strong relationship between savings, investment and growth and where one typically found high savings and high investment, growth tended also to be high, whereas when one looked at a country like South Africa, it was not doing well on the savings and investment front.

Government had tried to put together a host of policies to attract, or try and influence, savings in a particular way. But because of the savings:investment imbalance, the country had ended up with high real interest rates, low investment, low growth, high unemployment and social imbalance. Government's own performance with regard to investment had not been good and there was now a conscious policy decision to push it up to between 3% and 4% by the year 2003.

Despite these failures, a very strong foundation, particularly from the fiscal point of view, had been laid from which to address key issues such as ensuring a healthier deficit position that was driven more by capital rather than by recurrent expenditure. This should help the economy break beyond the 3.5% growth ceiling. What had been achieved was not only a reduction of the budget deficit, but an improvement in the quality of the deficit.

Many people had argued that the reduction of the budget deficit and the failure to deliver on the capital side of the budget was because of stringent macro-economic policies. However, Masilela said he would like to look at this from a different angle, and say that fundamental to this had been a function of poor expenditure and lack of capacity which had resulted in many departments ending up with huge backlogs in their capital programmes. On a day-to-day basis, this was a framework that tended to occupy Treasury officials as they put together the Budget. In terms of the current Medium Term Expenditure Framework (MTEF), the key objectives, or the key drivers, for allocations were economic and social infrastructure, social services, the criminal justice sector and local government demarcation. It was believed that social imbalances could best be addressed at the local government level and the recent restructuring would enable government to deliver even more effectively than it had been able to in the past. Day-to-day decisions were based on equity, emerging risks such as HIV/Aids and the quality and the need to maintain capital infrastructure for future productivity.

On critical policy research areas that needed to be considered, he said it would be important not to disrupt the stability achieved in the macro-economic framework. Inflation targeting had become one of the critical factors as had running a sustainable fiscus. So monetary and fiscal policy were now working very closely together to make sure that one did not disrupt the other and to ensure continued macro-economic stability, however, there were areas of concern. While government believed that it had done almost everything possible to encourage investment, investor sentiment was negative instead of being positive, particularly with domestic investors. The question being grappled with now was how this could be turned around. Quite clearly one could not hope to attract foreign direct investment if domestic investors were not confident in the economy. It was a very difficult situation. Financial sector reform was another critical area in which research and policy work was being undertaken to ensure that steps were taken to minimise, or get rid of, the systemic risk which was perceived to be inherent in the market.

Government would also like more research into further trade reform and greater labour market efficiency. Treasury had been concerned about production costs, which linked into the inflation targeting debate and which were a very serious threat to achieving set targets. Treasury would also like to see better co-ordination between government departments, especially given claims by business that it was receiving mixed signals from government. They were not sure whom to listen to. A co-ordinated approach in policy making would hopefully enhance the efficiencies of government and the efficiencies of decision making on the part of the private investor.

All these initiatives were aimed at breaking beyond the 3.5% to 4% growth ceiling. If South Africa was unable to achieve that, then the possibilities of reducing employment and addressing poverty were only being compromised. David Kaplan, the Chief Economist of the Department of Trade and Industry, said that while it would be wrong to say South Africa faced a crisis, it had experienced a period of missed opportunities. It had an extremely low growth rate relative to what was happening internationally and was probably currently growing at about under 2.5% a year while other economies similar to ours were growing at above 4%.

If South Africa was not going to grow when the world economy was growing, when would it grow? If not now, when? And the problem was not just with the limited growth, the problem was clearly with the character of that growth. It was very clear that the number of jobs per unit of new investment had fallen sharply while exports were increasingly capital and skill intensive. Exporters were not making use of the factor that South Africa had in abundance, that is, unskilled and semi-skilled labour. It was clear that while liberalisation had, in aggregate, been mildly job creating, there were many examples of firms that were gearing up for the export market by reducing their labour forces.

The big losses in employment had been in primary extractor sectors, exactly those areas that were previously regarded as the locale of comparative advantage. So in mining and agriculture, in particular, there had been very significant labour losses of perhaps close to a million. Even in the heartland of manufacturing, it was clear that there were job losses. Over the last five years, job loss had been almost 2% a year and this was not just for the manufacturing sector. If one took the sub components of manufacturing, it was very hard to find any sectors that had any appreciable employment growth.

So it had become important to get to grips with long-term structural employment, or involuntary employment, and think anew about the whole question of how to measure long-term structural employment that was affecting those least capable of securing other jobs.

Investment, at 14% of GDP, was too low and was not labour demanding, especially in unskilled and semi skilled labour terms. Even with primary commodity prices improving, South Africa was now seeing an upward tick in its economy. But commodities such as gold were not the hedge that they once were and platinum was now a more important export than gold was. These factors suggested structural problems at the heart of our comparative advantage and our employment locations. So it had to be asked where and what the new growth path was and DTI was examining this question quite hard.

Like it or not, GEAR had delivered on macro issues and there was now macro stability. Some people still saw GEAR as being a major problem, but the fact remained that there was now a secure macro environment which had led to good credit ratings. But the missed opportunities had major political ramifications, and the debate was now focused on employment creation and breaking through the low growth band.

DTI had identified certain new areas of growth and employment creation in the tertiary-cum-services sector, which was a very divergent sector covering areas such as education, health and communications. Most of them were not conventionally within the province of a Department of Trade and Industry, but were areas in which very significant developments were taking place, particularly around privatisation and public-private partnerships etc. These had enormous employment and investment potential.

For example, there were currently fewer people coming out of schools into universities and the universities actually had excess capacity. At the same time, very few foreign students were coming to South Africa but those who were coming in generated earnings of about R200 million. Countries such as Australia had an enormous industry in foreign students, which earned it about R9 billion a year. Our fees were cheap, we had excess capacity, and an English speaking country. There were some problems but we needed to explore the possibility of doing more to encourage foreign students.

One of the main deterrents for students had been that they had to pay R1 000 a year for a student visa instead of being able to get one for three to four years. The Department of Home Affairs could reconsider this approach to encourage more foreign students. What was needed was greater co-ordination by the different government departments to encourage various aspects of the new economy by paying attention to public-private partnerships, regulatory issues, skills development and human resources. The DTI believed that it had a role in leading this inter-governmental process.

Some people were critical of this new economy approach, saying that it did not fit into South Africa's traditional areas of concern, but Kaplan said he believed that there were important linkages from the new economy, from productive services, financial services and others back into the traditional sectors.

For example, large mining houses which were now very active internationally said that their ability to compete internationally rested with their ability to mass mine at a deep level. But they were also becoming more adept at big project finance management, construction management, exploration, and a whole gamut of activities that were quite new "economy-ish", that required considerable amounts of skill. This was an industry that employed a lot of unskilled workers but it was increasingly relying on skills and companies were having to have access to those skills to ensure their place in the market, their comparative advantage, their efficiency.

Another example was the clothing sector. The new African Growth Opportunities Act gave the sector access to the US market, not just in clothing and textiles but in a number of other sectors as well. As a result, manufacturers were talking about the possibility of creating 400 000 new unskilled jobs in the sector.That might be fanciful thinking, but there was clearly a major opportunity there because not only were local firms particularly well positioned to make the clothing but also to provide the logistical framework and packaging wanted by the big stores.

Of course, there would be complications and problems in getting our act together and using capacities more effectively, but the potential was there. He cited the example Dimension Data, a local networking company which had been listed in London and was now among the top 80 companies there. There were other such companies in health provision, in insurance and a whole variety of other areas. He suggested that TIPS' next forum should focus on the whole question of new economy and the human resource and skills development this would need.

Lisa Seftel, the Chief Director of Labour Relations, said that the Department of Labour had developed a labour model and approach and had been putting in place a very aggressive strategy of legislative and institutional reform to implement a number of reforms in the labour market to improve labour market efficiency, and increase skills development.

The new legislation covered skills development, collective bargaining in dispute resolution, affirmative action, employment equity and, most recently, the restructuring of the unemployment insurance system. But it could be asked if South Africa had got its labour market model right in relation to employment creation. Perhaps what was needed was a national employment strategy on which there was broad consensus. This would involve not just research but also social dialogue, or a social compact. The department was working hard to achieve this, even though it had proved to be rather intangible so far. Hopefully there would be more progress in the forthcoming year than there had been in previous years. The debate had centred on the effect of labour market policies on issues such as the ability to hire and fire, the level of wages, wage inequalities, on employment, on the capacity to create or to impede employment creation. But employment creation was not about labour market policy. It was much more about other very significant pillars such as macro economic policy, industrial policy and development policy. If one looked at the labour market per se, important issues to consider were the relationship between skills rather than the issue of wages or so called labour rigidity. If one looked at things like what was impeding employment creation, one should look at the relative importance of skills and wages, immigration policy, and the need to have improved logistics to respond to, to be able to fit into the new economy.

She had identified four areas of further potential research. On the relationship between the labour market and employment, she had found it quite disturbing that many of the papers and some of the inputs had made ideological assumptions and assumed them to be reality. There had been very little research into the real relationship between bargaining councils and so called wage rigidity. There had been a lot of talk about bargaining councils creating wage rigidity while the fact of the matter was that there were only two bargaining councils that had one national wage across the country. One covered the public service.

There had also been a tendency to, for example, say that because the Basic Conditions of Employment Act allowed for downward variation, this meant that there was a downwards trend in conditions of employment. This needed to be explored.

Another area needing research was the relationship between the impact of labour regulation on small business. There had only been one study, which had been commissioned by the department and might be accused of being biased. It had looked at the relationship between the impact of one law on small business and it had not concluded that labour laws were particularly onerous on small business, but more research was needed. There were some interesting studies that were beginning to emerge.

But then just more generally in the labour market, the reality was that many laws were still being implemented and often the department needed research to make sure that it was able to implement the laws in the best possible way. For example, one of the big plans was the whole question of sector and work place skills plans and whether they met the requirements of industrial policy and of enterprises.

In relationship to minimum wage setting, the department was involved with two very big investigations into what the appropriate minimum wages were for domestic workers and for agriculture. More research was needed to help the department develop these appropriate minimum wages. It was a political priority that minimum wages were set for these sectors but it was important to look at the dis-employment and other effects on the rural development strategy.

It would also be important to examine the impact of employment equity law on gender issues, on the employment of women, on the employment of Black people at all levels of the work force. Skills development policies were very new but it would be very important that, as they were implemented, there was monitoring and research that looked at the impact.

Seftel agreed with Kaplan that there were new opportunities in sectors such as clothing and textiles. What had to be examined now was the appropriate labour market regulatory institutional environment to support that. She said the department had been plagued by data problems, especially on how to measure unemployment.

It was now beginning to develop its own data bases through, for example, an employment equity registry which would be able to detail the employment, race and gender composition of the workforce of all employers who employed over 150 people. It was also trying to develop a database around compliance.

Seftel agreed that there needed to be better dialogue between researchers and policy makers. She had been concerned to note, however, that research commissioned by a particular person or organisation usually had a fairly predictable outcome because some debates were so very polarised in South Africa. She believed that researchers should strive to keep their intellectual autonomy in respect of their work.